

HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XLII.
PART III, 1983.

Natural History Museum Library



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Grantshouse, 22nd September, 1981 — The Sesquicentenary Meeting

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HISTORY OF THE BERWICKSHIRE NATURALISTS' CLUB

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CLUB NOTES

In 1983 the Club met as follows:—

19th May. Lauder and Thirlestane Castle.

15th June. Traquair Church and Glen House.

14th July. Whittingham and Callaly Castle.

17th August. Smallholm Church and Tower and Dryburgh Abbey.

22nd September. Jarrow and Arbeia, South Shields.

21st October. Annual Meeting, Berwick. In the morning, the Wine Museum, Palace Green, Berwick.

Extra Meetings were held at Belhaven House, Dunbar (Sir George Taylor's garden) on 4th May and on 9th June at Yetholm and Hoselaw Lochs, conducted by S. R. Warman and C. O. Badenoch.

Our founder, Dr. George Johnston, lived at 35 Woolmarket, Berwick for thirty-six years. On the initiative of Dr. Binnie (a Past President) and with the cordial agreement of Mr. Shiel Dods, the present owner of the house, a commemorative plaque, reading "Dr. Johnston, Founder in 1831 of the Berwickshire Naturalists' Club, lived here 1819-1855" was obtained and affixed to the house wall facing the street. This was handed into the care of the Borough of Berwick upon Tweed (of which Dr. Johnston was thrice Mayor) on the morning of 21st October, 1983 at a simple ceremony attended by His Worship the Mayor, the Sheriff and their ladies and the Lord Lieutenant of Berwickshire, by Mr. G. B. Millican, President of the Club.

We apologise to Sir George Taylor, F.R.S., for an error in the account of the Sesquicentenary Dinner at p.13 of HBNC XLII, Part I. He should have been described as sometime Director of the Royal Botanic Gardens, Kew and not as sometime Regius Keeper of the Royal Botanic Garden, Edinburgh.

PROCEEDINGS
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

THE DIVISION OF COLDINGHAM COMMON
1763-76

*being the Anniversary Address delivered by G. B.
Millican, Esq., President of the Club, on 21st October, 1983*

IT has been a singular honour to serve as President of the Berwickshire Naturalists' Club during the past year, and I should like to express my sincere gratitude for this privilege, and my warm thanks to the office-bearers and members of the Council for their support and for all their efforts on behalf of the Club. The continuing interest and loyalty of members are also much appreciated.

One of the special privileges which accompanies the Presidency is the temporary custodianship of the complete set of volumes of the history of the Club. All my spare moments this past year have been spent browsing through these books, a pursuit which has been of absorbing interest and which has greatly increased my awareness of many aspects of Border life.

As the time approached for the preparation of this address, and an appropriate subject eluded me, I drew considerable comfort from the disclosures in many of my predecessors' Presidential addresses of their similar difficulty. My solution is a return to my native heath and a study of the various actions raised in the mid-18th century relating to the division of Coldingham Common, one of a number of such Commons to be found in Berwickshire in the 17th and 18th centuries.

A Common, or Commonty, has a precise legal definition in Scotland. It is either land owned by different proprietors, or grazing land owned by one person but used by several. Before the Reformation, Commons were owned by the Church. In the century or so following, the rights of grazing, the cutting

of peats and divots, and the pulling of heather were established by the heritors and their tenants in the various villages.

Strictly speaking, the term 'heritor' could be applied to any landowner but in practice was confined to a landowner in his role of a person liable to contribute to the upkeep of the parish church.

By an Act passed in 1696, during the reign of William III, it was laid down that Commons could be divided at the instigation of an interested party by a summons against all others with rights. The Lords of Council and Session had the power to determine rights and to value and divide the Common land. Mosses that could not be conveniently divided were to remain common property for the use of those not entitled to a share in the division. If those claiming a right to the Common were fortunate enough to win their case, the Act stated that the land allotted to them was "for their enjoyment in all time coming." Failure, however, resulted in the order to desist and to stop molesting those with a right to the land.

In 1763 an action was raised in the Court of Session in Edinburgh for the division of Coldingham Common. In ancient times this Common constituted part of the forest belonging to the Priory, and the roots of oak, birch, and hazel can still be found in certain places. Whilst farming Greenwood I cleared a small area of scrub hazel and birch which was probably a remnant of the original woodland.

Prior to the division, Coldingham Common covered some 6,000 undivided acres, this extensive area no doubt giving rise to the proverb, "He has a conscience as wide as Coldingham Common."

Sir William Brereton's description of his crossing of the Common in 1636 gives us a picture of it as it would have appeared at the time of the legal action. He wrote, "On leaving Ayton, after you pass a few corn fields near the town, you pass over the largest and vastest moors that I have ever seen which are now dry and whereupon in most parts is neither sheep, beast nor horse. There is a mighty want of fire in these moors; neither coal nor wool nor turf; only the bare top turfs with heather upon them." Lack of fire there may have been on the moors but the Court of Session case, which stretched over thirteen years, engendered considerable heat. The names of those involved in the long legal battle have passed into the annals of history but most of the farms and estates are readily identifiable today.

The pursuers in the division were Sir John Hall of Dunglass, William Ramsey of Templehall, George Turnbull of Houndwood, John Bogue of Hallydown and James Lumsdaine of

Blanerne against Sir John Home of Renton, Sir James Home of Manderston, Patrick Home of Billie and many others, including a large number of feuars and residents of Coldingham.

Before claims could be considered a plan of the Common had to be made and the marches marked off with pits and stakes. A surveyor was appointed to undertake this task and Commissioners likewise appointed to take proofs and hear evidence. Numerous witnesses walked the marches and took the oath before the Commissioners as to the correct position of the pits and stakes. The land had also to be valued, and this task was given largely to farmers who were no doubt considered to be fairly knowledgeable on the subject of land valuations.

Commissioners met on numerous occasions and in different places to hear and dispose of the various claims. Meetings frequently took place at Press, which is described as being in the middle of the Common. A vast number of claimants were interviewed but many were unable to substantiate their claims with the required proof. This had to be in the form of written documents or, as an alternative, the sworn evidence of witnesses that claimants had had unchallenged and uninterrupted possession of rights to pasturing for forty years. Many were unable or unwilling to produce their titles, and it was extremely difficult to find witnesses to swear to the forty year period.

Problems with written evidence finally defeated one agent, Mr. George Home, a Writer in Edinburgh, who had undertaken to represent the feuars and people of Coldingham—69 in number. After ten years of struggle he returned his mandate to Thomas Cockburn, the agent in the division, complaining, "In the beginning I was anxious to do all in my power for the small feuars but I could do nothing without seeing their Rights and Titles and not a single feuar would agree to send them to Edinburgh. I am therefore obliged to give up the cause."

Among those with no documentary evidence, and basing their claims on sending cattle and horses to the Common for the requisite legal period of forty years, were the tenants of Brockholes, Horseley, Swansfield and Highlaws. It was proved that, whereas they cut peats every year, they made use of the Common only in dry summers when grass was short.

Auchencrow tenants also endeavoured to establish a claim to a portion of land on the same basis, as did James Hill, described as "Eggman at Shillamdykes."

To prove that the people of Auchencrow did *not* have a right to a share in the division, an old story was revived of the day in June 1720 when the inhabitants of Coldingham were called out to drive the Auchencrow people and their cattle off the Com-

mon. From ten in the morning until three in the afternoon they searched for the Auchencrow folk. Failing to find them, they loaded their carts with the Auchencrow peats and destroyed what they were unable to carry away. That they were never challenged or prosecuted for their actions was offered as proof that the Auchencrow people had no legal rights.

Some small feuars claimed that since the Common had been Priory land, and their houses and lands originally belonged to the Priory, they were entitled to rights on the Common. They believed that all that was required of them was to show that this right had not been lost and that there was no necessity for them to produce documentary evidence. The Commissioners, however, refused to accept this plea and insisted on proof of rental values.

The Church itself had an interest in the proceedings. The Commissioners were instructed by the Court of Session to take proof from the minister of Coldingham, Mr. Jollie, and to settle his claim for the pasturage of two cows and two horses. A witness for Mr. Jollie recalled that the previous minister, Mr. Brydon, regularly sent three cows and two or three horses to the Common in charge of his own servant, a practice continued after Mr. Brydon became tenant of Bee Park. From time to time Mr. Brydon also sent stirks in charge of the Common herd. In addition, he had eight or nine drags of peat and three or four carts of heather from the Common every year. In settlement, the minister was granted 5.80 acres in lieu of grazing two cows and a horse. I believe this field is still part of the Coldingham glebe.

During the proceedings the Common herds were examined. The books of the Bourlaw Court of Coldingham, the Court which had authority over the Common, provide an interesting insight into the appointment and duties of the Common Herd of Coldingham, who was responsible for the village cattle, and we can assume that other herds in the district had broadly similar conditions of service.

The Coldingham Herd had to take the cattle to the Common soon after the corn was sown in the spring and keep them there until after harvest. Whilst herding, he was forbidden to work at "stringing". "Stringing" was the description given to knitting or plaiting grass or straw into a string or strap to make an ornamental lace or tape, the fore-runner of corn dollies. The penalty for stringing was a fine of forty Scots shillings. The herd's pay for looking after the animals was a peck of bere, i.e. barley, before Whitsunday, and a boll after that date for each beast in his charge. His terms of employment also stated that should he desert his post he was never to be employed again.

The records of the time reflect the current opinion concerning the herds. "These herds were like their betters, very susceptible to undue influence, and for a very small bribe were in the use to smuggle the cattle of many people who had no title amongst those of their constituents."

This view-point on the herds was undoubtedly borne out by evidence which was produced during the proceedings but the proceedings also revealed that some of the heritors were equally quick to grasp any opportunity to advance their own interests without regard for the legality of the situation.

One of the heritors who created a great deal of trouble was George Turnbull of Houndwood. His name appears with great regularity throughout the proceedings and he seems to have been both persistent and devious. He presented many petitions, including one in the very early stages relating to encroachments on the Common which he maintained amounted to a loss of about 1,600 acres since it was surveyed in 1561.

In response to this petition the Court of Session ordered Sir John Hall of Dunglass, Patrick Home of Billie, James Lorrain, Sheriff Clerk, and William Tait, Writer in Dunse, to appear on 13th November and produce the old Record of the Marches. John Hall swore he did not have the old riding or perambulation of the marches but produced a document entitled "A Copy of the Raide of the Common Muir of Coldingham, done before John, Commendator of Coldingham, on 11th March, 1561." Home's name does not appear again but the failure of Lorrain and Tait to appear is noted. Tait was said to be so ill that to travel to Edinburgh would endanger his life, and this contention was supported by a medical certificate. The Court decided that Lorrain and Tait should be examined in Dunse but, when by the following February they had not produced the necessary papers, Turnbull again petitioned for the production of the 1561 records.

When some months later these records had still not been produced, their Lordships decided that this relatively minor matter should not be allowed to hinder such necessary work as the division of Coldingham Common, from which the whole community would benefit, and they dismissed Turnbull's petition.

The summer of 1765 seems to have been a busy one for the Commissioners. This was when the first plan for the Division was drawn up by the agent, Mr. Cockburn, and more than eighty witnesses were examined on oath until the heritors were satisfied with their evidence.

The resolute George Turnbull of Houndwood was the first

heritor to appear. When the examinations were over, he petitioned for the Common to be remeasured but as there were about two hundred other claimants, and he was the only one who wanted the remeasurement, his petition was not allowed. In giving evidence some of the witnesses referred to the considerable area of land which Turnbull had tried to take from the Common in recent years, and this was duly noted by the Commissioners.

By the 19th June, 1766, Mr. Cockburn called on all the heritors to produce their titles and certificates of the rental value of their lands by 20th November. An advertisement to this effect was placed in the Edinburgh newspapers and on the church doors at Coldingham and Ayton. Many debates followed the failure to produce the necessary documentation.

Over the years there were many hearings without much progress being made. In 1771 Mr. Mather, the surveyor, reported that most of the stones and pits used to mark the bounds of the Common when proceedings began in 1763 were now worn or filled up and that the plan then made had been lost. He proposed that a new survey be made and requested a fee of £110 to cover his costs and also the cost of the chain men who would set up the markers.

It was agreed to pay Mr. Mather £105 for his work and to give it to him in instalments as the work progressed, the final payment to be made on the delivery of a complete plan at the conclusion of the division. The inference from the records is that Mr. Mather was not very conscientious in carrying out his duties. He was instructed to attend a meeting at Press at 10 a.m. on the 18th May and informed that failure to do so would result in another surveyor being appointed. Perhaps his work on the Common was an assignment Mather didn't particularly relish, or he may have felt resentful at his requested fee being reduced by £5; at any rate, he did not appear at the meeting and Alexander Low of Woodend was appointed in his stead to carry out the survey and division. The plan he made is lodged in Register House in Edinburgh and can be seen there.

As it was accepted that the division would be based on rental value, certain landlords, in an attempt to secure a larger share, took measures to increase the value of their property. One paid a tenant £500 to depart at Whitsunday 1768. He then advanced £300 or so to the next tenant to build new premises and this enabled him to obtain a much higher rent. At Press the rent had been almost trebled and a new Inn added. The rents at Swansfield and Horseley were raised from £80 to £150, a vast increase in those days. However, these attempts to enhance their claims failed. In 1771 it was stated that the division would

be based on the rent values of 1748-49.

An important factor in the proceedings was right of access to the Common which had to be determined by the Commissioners. They also had to decide which roads were necessary and the width they should be. Apart from the Great Post Road from London to Edinburgh, which it was decided should be forty feet wide, other roads were to be thirty feet, still the distance between the hedges in some of those roads today.

When it appeared that all the roads had been settled, it was discovered that Mr. Fair of Muirside had no road from his holding. To give him access a road sixteen feet wide was provided by deducting eight feet each from Bogangreen and Westerside, and to compensate these two holdings the width of the Lumsdaine road was reduced where it adjoined these properties.

An important meeting was arranged for 22nd November 1772 when the plan of the division would be available for inspection. If no objections were received the Commissioners were to order payment of the surveyor. This seems to have been done, and the plan duly signed by Sir John Stewart of Allanbank and James Lorrain of Angleraw and delivered to Lord Elloch in the Outer House of Session on 15th January 1773.

The proposed division gave major shares to Wedderburn and Dunglass—approximately 1,325 and 1,292 acres respectively—while the feuars of Ayton and Auchencrow received the smallest allocations, 49 acres to Auchencrow and just over 12 acres to Ayton.

This was far from the final episode in the saga. Sixty-three feuars in Coldingham, outraged because they had been given no specific allocation, petitioned the Court. They believed their interests were being taken care of but when the report of the division and valuations was made known they found, to their astonishment, or so they said, that out of the thousands of Common acres, their total allocation, with all the other small feuars, amounted to a mere 168 acres along with the Long Moss.

A further grievance was with the quality of the land allotted to them. While some of the Common was valued at 5/6d per acre, their allocation was only valued at 3d per acre, indicating the poor quality. They further argued that their land was more than three miles from Coldingham, and that whereas distance was no object to the rich who had horses and carriages, for them land at a distance was useless. Access to the quarry for stones for building their houses and byres was yet another concern.

Mr. John Swinton, Writer in Edinburgh, appeared for the feuars but he had the recurring problem of obtaining proof of title. The claims were examined individually, and after lengthy proceedings and acrimonious arguments the Court finally agreed to adhere to its original decision. The Advocate for the heritors commented that the small feuars appeared to be interested not so much in obtaining justice as in opposing the division by all possible means.

Undaunted, the feuars persisted with their claims and a further petition was presented in which they maintained that the loss of right to the Common was a form of banishment and would result in depopulation of the villages around the Common, particularly Coldingham. They said they found difficulty in determining whether the cruelty, the ingratitude, or the impudence of the heritors was greatest, bearing in mind that it was by the industry of the feuars alone that the estates of the heritors, who had been granted Common land, were improved and their values increased.

For their part, the pursuers stated that most of the small feuars were clamorous and abusive fishermen and cadgers who had already got more than they were entitled to. They acknowledged that sixteen of the petitioners had legal rights but claimed that the allotment granted was excessive for that small number.

The exchange of abuse was more than verbal. When the feuars began to challenge the division, the other parties involved, who feared that encroachments might be made on their land, secured an injunction to prevent the feuars from trespassing. Notwithstanding this interdict, trespassing did take place, cattle being pastured and turf cut. On Sunday, 7th August, the following notice was read at the Kirk doors of Coldingham and Ayton and posted on the Smithy door at West Reston:

“This is to give notice to the whole public of the Parish of Coldingham that all feuars and householders are desired to keep their property and possessions of eating and casting as formerly on the Commonty of Coldingham, and it is likewise desired that the towns of West Reston and Auchencrow and the Steads belonging to the said towns to meet at John Purves’ in West Reston on Monday first, being the 8th August instant, to take somethings to consideration of the said Commonty, everyone for their own interest, precisely at six o’clock on the foresaid day.”

Following the meeting a group, described as ‘a lawless mob of thirty and upwards’ assembled at West Reston and went to Hillend Moss, which had been allocated to George Turnbull of Houndwood, and they cast a large number of turfs. Unable to

cart them all away at once, they stacked some, but after they had departed Mr. Turnbull carted some of them to Houndwood House.

The following day the same mob, with a number of carts and armed with sticks and bludgeons, proceeded to Houndwood House and riotously carried away several loads of turfs to West Reston, returning a few days later to try to obtain the remainder which Mr. Turnbull had placed under lock and key. On both occasions the mob issued violent threats against Mr. Turnbull and his son-in-law, repeatedly reminding Mr. Turnbull that some forty years earlier his father had lost his life in a riot over the use of the road to the Common and warning that if he and his son-in-law opposed their access they could expect the same fate.

Each time the feuars were refused the crave of a petition, they presented a fresh one, old arguments being reiterated and new ones added. By now William Spouse was heading the small feuars, and it is highly probable that this was the same William Spouse who, by some means or another, had obtained the font from the Priory and used it as a pig trough.

As before, the evidence in support of the feuars' claims was complicated and unsubstantiated, or not forthcoming by the stipulated time. Some of it was characterised by a lack of credibility. One man, for instance, claimed for a house which was found to be a ruin. Of others it was said, "They have not that degree of memory which can be relied upon as proof of facts."

On one occasion the feuars argued for so long among themselves about the quantities of turf and peat they required for building their houses that by the time they were ready to proceed with the proof it was so late that the Sheriff declared he was unable to continue with the proceedings as he was a long distance from home. He adjourned the hearing, and to save the feuars expense intimated that he would take what proof they could offer at Greenlaw on a given date. Although he waited there all day, none of the feuars appeared. This was taken to indicate that they did not wish to pursue their claims and the heritors agreed to set apart half-an-acre in Buskinburn Dean for the feuars to quarry stones.

On the 17th February, 1776, Patrick Murray, the Advocate for the heritors, asked the Court to instruct the Surveyor to mark out the quarry, and a road to it. He also asked that a surplus of about 17½ acres, allotted in error to Alexander Home, should be sold by Public Roup, the proceeds to be applied to the account to defray the expenses in the process of the division.

The lengthy proceedings, instigated in 1763, concluded on 2nd March 1776 when the Court finally decided the Decree of Division and lodged the plan. Custody of it was given to Mr. Home of Wedderburn. This distinction was conferred on him as the largest heritor with the highest valuation and paying the largest share of the costs of the division. He was instructed to make the records available to the other heritors as and when required.

I have confined my address to a study of the division of Coldingham Common but it seems to me that a study of the ways in which the division has affected the surrounding communities would be rewarding. That, however, I leave to a sociologist.

(Relevant references are: HBNC III, 251; Scottish Record Office: RHP 155, 6144 (Plan); C.S. 22/606 and C.S. 236, H 3/11. These latter are used with the approval of the Keeper of the Records of Scotland.)

THE REVEREND H. STANLEY ROSS, B.A.

The Reverend H. Stanley Ross, President of the Club in 1977-78, was born at Bournemouth in the 1st August, 1918. He died in Berwick on the 5th November, 1983.

As a young man while working in a famous London business house, he attended the Edgware Presbyterian Church. The minister, who himself later moved to Berwick, influenced him to offer for the English Presbyterian ministry. He then went, as a mature student, to read philosophy at University College, London, gaining high distinction in the Honours Examination. During his subsequent theological training, at Westminster College, Cambridge, he developed a deep interest in Church History and later became an examiner in that subject, perhaps a portent of his interest in the ecclesiastical and secular history of North Northumberland and the Borders.

After serving as an Assistant minister at the Marylebone Presbyterian Church and also working as an officer of the Student Christian Movement, he was invited back to his old College, to serve three years as a Tutor. From there he was called to Weoley Hill Church, Birmingham, particularly serving the students and staff of the nearby Selly Oak Colleges, where he had a long and influential ministry.

In 1956 his former Edgware minister, the Reverend W. Z. Gibb, now at Wallace Green Church, Berwick, invited Stanley Ross to preach there at Anniversary Services. This was his first visit to Berwick and he was greatly taken with the town. The following year he returned with his wife and young daughter for a summer holiday. This was the first of many such holidays before he accepted a call in 1970 to be minister of the St. Paul's Presbyterian Church, Spittal.

In the intervening years Stanley Ross had become one of the leading younger ministers of his Denomination. Before the end of his active ministry he had served as a Convenor of most of its major Committees, including the important Business Committee of the General Assembly. Although deeply attached to Presbyterian ways, he wholeheartedly supported the union with the English Congregationalists, being involved throughout in the negotiations which resulted in the United Reformed Church. However, none of this important and demanding Denominational work impaired his devoted and influential service to his congregations in Birmingham or later at Spittal.

In his limited leisure time he now read widely in the history of Berwick, Northumberland, and the Borders, and particularly, in the history of the local Presbyterian congregations. During his summer holidays he and his family toured the area extensively, visiting places, sites, and churches of which he had been reading. He used his camera everywhere, building a considerable and valuable photographic record. When therefore he came to Spittal, a church with historical associations, he was no ordinary incomer but already a very well informed Border historian. A little earlier he had leased a cottage at Cessford. He and his family found great happiness in this rural retreat, and it and the Spittal manse provided excellent bases for his continued exploration and studies.

He joined the Club in 1971. Despite reticence in displaying his own knowledge, he was soon recognised as a member with a valuable contribution to make to the Club's activities. He became President in 1977-78, and characteristically delivered as his Presidential address a shrewd and sensitive comparison of two earlier Presbyterian ministers who served in North Northumberland. At the Club's Sesquicentenary Dinner in September 1981 he was called to propose "The Guests", a privilege he valued highly. Nothing, however, gave him more pleasure than to become the Club's Librarian. He was a bibliophile and tackled with quiet efficiency a reorganisation of the Club's books. This was a role in which he might have served for many years.

Unhappily, that was not to be. He had fought uncomplainingly for a long time against debilitating diabetes, but in 1981 was forced to take early retirement. Initially freedom from ministerial responsibilities appeared to bring improved health. He moved his home to one of Berwick's attractive, 18th Century, houses. There he had about him his own extensive library, to which he gladly gave members access, though sometimes with a gentle reminder as to ownership if a borrowed book was kept overlong. There too he and his

wife were gracious hosts to many members. He continued a regular attender at the Club's meetings, where his quiet humour and friendliness were appreciated. His wisdom and experience were of great help to the Council.

In 1982 however he suffered a stroke from which he never fully recovered, despite a most gallant effort and his wife's constant support. He died following a second stroke.

The large congregation at his funeral service showed how highly this distinguished but modest Christian minister was esteemed by the people whom he had served with such devotion, as well as by his fellow Christians of different Denominations, and by the members of the Club.

H.D.J.

He was a kindly man—T.D.T.

TWEED SALMON FLIES

Dr. W. Davidson

George M. Kelson in his book "The Salmon Fly", published by the author in 1895, gives a list of about 300 Standard Flies with details of their dressings. In his book the following flies are recommended for fishing the Tweed, with the Inventor's name in brackets.

Benchill (Malloch), The Black Doctor (Wright), The Black Ranger (Wright), The Blue Charm (W. Brown), The Blue Doctor (Wright), The Byrel (Wright), The Chatterer (Traherne), The Dandy (Wright), The Durham Ranger (Wright), The Dusty Millar (Jewhurst), The Golden Butterfly (Traherne), Greenwell (Wright), Hempseed (Kelson), The Jeannie (W. Brown), The "Jock Scott" (John Scott).

'Jock', for the inventor of this fly was hardly known as John Scott, was born at Branhholme in February 1817. When thirteen years of age he began his Salmon-angling career under the directions of Robert Keress, head keeper to the (then) Marquis of Lothian. In two or three years, on leaving this situation, he entered the service of the Prince of sportsmen, the late Lord John Scott, with whom he remained as Fisherman, for full five-and-twenty years of his life. Afterwards Jock spent a year or two at the fly-table and lived honourably by the constant practice of that art which he was born to enrich. He then became keeper to the Earl of Haddington in whose service the poor old fellow died on 24th January 1893. Jock was no giant, but had a big heart and a constitution of iron. Second to none at other sports and pastimes in the North, his soul was chiefly in fishing and most of his time was spent in the water without waders.

John Campbell (Wright), John Ferguson (Wright), Leigh's Sun Fly (C. Austen-Leigh), The Lion (Wright), The Little Kelly (Kelson), March Brown, The Red Drake (Kelson), used on the Teviot,

Roy Neal (Kelson), The Silver Blue (W. Brown), The Silver Doctor (Wright), The Silver Grey (Wright), Sir Herbert (Sir H. Maxwell), Sir Richard (Rycroft), The Skirmisher (Kelson), Skirrow's Fancy (Rev. W. Skirrow), Taite's Fancy (Taite), Thunder and Lightning (Wright), The White King (Wright), and the Wilkinson (G. Kelson).

William Scrope in his book "Days & Nights of Salmon Fishing in the Tweed" (1843), mentions the following flies used on the Tweed.—The "Nancy", and six tied by Charles Purdie—No. 1 Kinmont Willie, No. 2 The Lady of Mertoun, No. 3 Toffy, No. 4 Michael Scott, No. 5 Meg with the Muckle Mouth, No. 6 Meg in her Braws.

John Ashley Cooper in his book "The Great Salmon Rivers of Scotland" (1980), mentions the following Tweed flies.—(1) The Silver Wilkinson first tied in 1859 by the Rev. P. S. Wilkinson, together with the Greenwell. (2) The Lady of Mertoun. (3) The Garry Dog. This fly was invented by John Wright about 1920. The Minister's dog, Garry, born 1913, belonged to the Rev. D. Denholm Fraser, Sprouston. Garry used to visit John Wright's shop frequently. The dog was white in colour and John Wright removed some of his hairs over a period of years. He stained the hairs yellow—hence the name of the fly—The Garry or the Yellow Dog. (4) The Thunder and Lightning, invented by James Wright in the 1850's. (5) The Durham Ranger, invented about 1860 by James Wright for a party of English Fishermen who had arrived from Durham. (6) The Blue Doctor, The Black and Silver Doctors (all by James Wright). (7) The Jock Scott and (8) The Toffy. Other wellknown flies are—Kate, Greenwell (tied by John Wright for Canon Greenwell) and the Silver Grey and White Wing.

James Wright was born in 1829 and died in 1902. John Wright, his son, was born in 1872 and died in 1949. Both were expert and wellknown Fly-tyers, had a fishing tackle shop in Sprouston and both are buried in Sprouston Kirkyard.

Up to the 1920's flies were dressed with birds' feathers in sizes 1/0 (small) to 7/0 (large) for fishing in big and cold waters. From April to September small flies were used, from size 1 (large) to size 12 (small). The Garry fly used dog's hair for the first time; since then stoat and badger hair have been used. Up to 1923, fishing with a light line and keeping the rod top high (so that the fly would be near the surface of the water) was used in the summer months.

In 1923, A. H. Wood of Glassel & Cairnton, on the Dee, greased his line to make it float. He became an expert of his invention and caught more salmon than those using the older methods. It is called Greased Line Fishing and is well described by Anthony Crossley in his book "The Floating Line for Salmon and Sea Trout" (1939). G.P.R. Balfour-Kinnear also gives an interesting account of it in his book "Flying Salmon" (1937).

In recent years different weights of lines have been made for the following purposes.—(1) To float. (2) To sink slightly (e.g. The Kingfisher) and (3) To sink deeply. This has greatly simplified fly fishing. Some tube flies are made with their bodies weighted with

lead to make them fish very deep. I have tried them but they are so awkward to cast that I have discarded them.

I have about 200 Salmon Flies in my collection, the following being the main varieties.—The Black, Blue and Silver Doctors, The Durham Ranger, The Dusty Millar, The Garry, The Greenwell, The Shrimp Fly, The Silver Grey, The Thunder and Lightning, The White Wing and the Wilkinson, all in sizes 1/0 to 7/0, and in size 1 to size 4.

In the small sizes 5 to 12, for floating line fishing, I have the following patterns.—The Black Doctor, Blue Charm, Dunkeld, Garry, Clover, Hairy Mary, Jeannie, March Brown, Sir Richard, Silver Blue, Silver Grey, Shrimp Fly, Stoat's Tail, Thunder and Lightning, White Wing and Wilkinson. Most of these flies have double hooks which, I think, give a better hold than single hooks.

Just to show that the pattern of fly was not so important as previously thought, A. H. Wood in one season, while fishing the floating line, used only one pattern, the March Brown, on which he caught his usual number of salmon. Latterly he confined himself to two patterns, the March Brown and the Blue Charm. The Blue Charm, The Silver Blue and Jeannie are really Dee flies but are now used extensively on the Tweed.

The Floating line is used when the air temperature is higher than the water temperature. The river is usually low when the best results are got by wading. The late Duke of Roxburghe, who is described in Jack Chance's "Debrett's Salmon Stories" as one of the best salmon fly-fishers in the country, always insisted that his guests wade and not fish from a boat, when fishing the Floating line.

Over the last 25 years tube flies with treble hooks have been used for sunk fly fishing, instead of double or single hooks. The patterns most commonly used are.—The Garry, Gordon's Fancy, Munro Killer and White Wing. The late Duke of Roxburghe caught most of his autumn fish on a "Gordon's Fancy".

At Makerstoun House, Kelso there is a lovely screen in the drawingroom decorated with numerous salmon flies.

In the laws for Salmon Fishing on the Tweed it is stipulated that it is "Fly only" from 1st to 14th February and from 15th September to 30th November. As fly fishing for salmon is much more pleasant than bait fishing, I would like to see it "Fly only" from 1st April to 14th September as well as the present rules. The late Mr. Quarry Wood, Surgeon at The Royal Infirmary, Edinburgh and at Peel Hospital, fished the Tweed regularly and always fished "Fly only". John Ashley Cooper, one of Britain's best salmon fishers and a regular visitor to the Tweed, fishes "Fly only" during the whole season.

In my best day's fishing in over 60 years I caught on The Duke of Roxburghe's Upper Floors beat on the Tweed on 17.10.64, seventeen salmon and one sea trout weighing 234½ lbs. on a 2½ ins. "Gordon's Fancy" tube fly. Just before lunch I caught four salmon in four consecutive casts of the tube flies. I now use three patterns only—The Garry for coloured water, The Gordon's Fancy for clear

water and the White Wing when the light is failing. It is a general rule that one fishes a bright fly on a bright day and a dark fly on a dull day but there are many exceptions to this rule. I think the main thing is to be optimistic and have faith in the fly you are using. It is important to use the right size of fly for the water that you are fishing. You never know when salmon are going to take so it is important to be at the right place at the right time.

LIBRARIAN'S REPORT

The Librarian administers the Club's stock of past issues of the Club's "History", and would welcome offers of unwanted copies. In particular copies of Vol. XXXI parts 1, 2 and 3 (1947, 1948 & 1949) are needed to fulfill orders.

The proposed removal of the town Library to new premises, in the not too distant future, will mean the accomodating of our Library in part of that building.

Dr. A. G. Lunn has produced "A History of Naturalists in North East England"; copies are available for £2.00 (postage 33p) from the Secretary, Department of Adult Education, The University, Newcastle upon Tyne, NE1 7RU. (Cheques should be made payable to "The University of Newcastle upon Tyne")

Acquisition Records.

LEATHER, G. F. New Light on Flodden (Gift of Mrs. D. K. Swan)

HOME, M. D. Notice of High Water Marks 1886

THE BORDER MAGAZINE Vols. 2-7, 9-37 (1879-1932)

LUNN, A. G. A History of Naturalists in North East England 1983

ELLIOT, G. A. The Norman Family of Lorraine (Typescript)

Library Account 1982-1983.

<i>Income</i>		<i>Expenditure</i>	
Opening Balance	475.69	Postages	5.23
Donation: Mrs D. K. Swan	10.00	Balance forward	599.35
Sales of the "History"	89.96	(Royal Bank of Scotland)	
Bank Interest	28.93		
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Hon. Librarian

WILD GEESE IN THE EASTERN BORDERS: AN ASSESSMENT, WITH SPECIAL REFERENCE TO AGRICULTURAL IMPACT

C. O. Badenoch

The collection of monthly winter wildfowl counts over the last twenty years, by the Wildfowl Trust, (see Ogilvie, M. A. (various); Boyd (1963); and Boyd & Ogilvie (1969)) supplemented with annual autumn goose censuses, now provides good indices, if not absolute figures, on the changes in wildfowl use of different parts of Britain. Brotherston (1964) gave an account of the distribution and numbers of Pinkfooted and Greylag Geese in S.E. Scotland based on simultaneous autumn counts at all known roosts between 1955-63 supplemented by less complete counts between 1950-54 and by anecdotal observations of local people for 30 years prior to that. In particular he noted the rise in inland roosting and feeding during the Second War due in part to increased coastal disturbance (indeed!) but more significantly to greater agricultural mechanisation together with increases in cereals and rotational grass. In a later study Newton, Thom and Brotherston (1973) updated the distribution data and looked more closely at the flock behaviour influenced by weather, shooting and land-use, in South-east Scotland.

At this time of changing cropping patterns and increasing concern on the part of farmers and landowners about the effects of wild geese in the Borders it is perhaps opportune to review again some of the observational and population data now available.

There are four species of wild goose commonly recorded from the Borders Region. They are:-

1. Canada Geese (*Branta canadensis*).
2. Barnacle Geese (*Branta leucopsis*).
3. Pinkfooted Geese (*Anser brachyrhynchus*).
4. Greylag Geese (*Anser anser*).

Of these, the first is present all year round as a feral population—i.e. having escaped or become free-flying from an introduced, ornamental collection, while the others are primarily overwintering birds from more northern latitudes.

CANADA GEESE

Canada geese in the Borders now (1983) number some thirty to fifty birds with occasional supplementation from outside the area—probably from partial migrant groups occurring in Northumberland and Yorkshire. They breed in the Borders but as yet pose no immediate threat to agricultural production. It is proper to note, however, that this species was present at similar levels in Perthshire 10 years ago and the population there is now over three hundred birds, again perhaps the natural increase being augmented by incoming birds from English migratory populations. At these Perthshire levels the

species can wreak considerable damage especially on ripening cereals in summer. The main Border flock is centred on Mellerstain, Gordon, but individuals have attempted to breed up to 20 miles away from there, and there is no doubt that the development of this species locally should be carefully watched. Clover, brassicas and grasses/cereals are all taken.

BARNACLE GESE

This is a comparatively rare species in the world, its breeding being confined to Greenland, Spitsbergen and the northern islands of Russia. Most winter birds seen in the Borders are thought to be from Spitsbergen *en route* to or from the Solway marshes—the main wintering locality. The numbers seen in the Borders are generally small, in parties of less than twenty. They turn up at a variety of open waters in the Borders usually with either of the species of grey geese, often just before the spring migration. At present levels they are of no economic concern in this Region.

PINKFOOTED GESE

Pinkfeet are by far the most numerous wintering geese in the Borders, arriving by mid-September to October and leaving in April, although recent years have shown an earlier arrival and later departure—into mid-May—in some localities. The peak counts are in October/November and April. They are a comparatively rare goose on a world scale, Britain hosting 75–80% of the winter population. Recent breeding success, low adult mortality, adequate feeding supply and various conservation measures on breeding and wintering areas has raised the British winter population from around 30,000 in 1950 (Cramp, *et al*, 1977) to over 90,000 by 1980–82, (Salmon, 1982).

The Borders winter population is split between north Tweeddale/Midlothian with 3 Border roosts—but quite inseparable from 3 or 4 Lothian roosts—and a more distinct Merse group, centred on Greenlaw. The Lothian/Tweeddale roosts hold the largest numbers by far with up to 25,000 individuals at any one time representing circa 21–23% of the world population, (Fig 3). Feeding is dispersed through a wide area of arable and grass in Lothians, Peebles and Lanark and reports of serious damage appear to be few to date. The Greenlaw population is much smaller, varying between 200–6,000 birds, the number fluctuating with the season, availability of food, previous breeding success and degree of shooting/disturbance. There is obviously some seasonal exchange with the Pentland-Lothian group and feeding/roosting parties are noted occasionally in Gala Water, as far south as Fountainhall, Soutra and in Lauderdale. Such groups are generally quite small; less than 100 birds. The mean numbers and fluctuations of this species over the years in the Merse group tended to have remained relatively even despite the phenomenal peaks in the Pentland/Lothian group since 1980. (Fig 1 and 3.) However it would appear that the birds are staying more constantly in the area throughout the whole winter now, compared with previous years when numbers tended to decline between the migration

peaks. In hard weather from December to February numbers can drop suddenly as the geese move further south either to the Wash or the Solway, or else down into Lancashire.

Most feeding for the Merse group is confined to an area roughly bounded to the north by the Westruther-Duns road (B.6456), to the west by Harelaw Moor, Eden Water and Harehaugh Craggs, and to the south by the Ednam-Eccles-Leitholm-Swinton road (A.699). The eastern boundary is by no means as identifiable, but in most years corresponds to the Duns-Swinton road (A.6112), although recently parties of up to 400 birds have been seen in the Whitsome-Allanton area, four miles east. Within this main feeding zone, by far the highest concentrations are in an elliptical area about eight miles long by three miles deep centred about one mile east of Greenlaw, (See map).

Actual assessment of absolute numbers is difficult because of their habit of utilising resting fields for overnight roosts, away from usual open water night roosts. Such day-time rests and night-time roosts are invariably in open rolling ground with clear all round visibility and free from policy woodland, plantation, hedgerow trees or buildings. Similarly, very broken ground and steep river valleys are avoided. Such field rest/roost areas have been noted in 1980-83 at Hexpath-Rumbleton, Hallyburton, Todrig, and Hunthall-Winkerston-Ryslaw. River roosts on slack pools of Blackadder and Whitadder Waters have also been noted locally.

These areas of feeding, resting and roosting depend to some extent upon season and cropping pattern, but certain fields are almost habitually used by geese while others are seldom, if ever, used, the reasons for this selection being often only discernible to the geese themselves! The Pinkfeet areas are quite sharply defined from those of the Greylags (see below) except at the start and end of the season when numbers of each species can share or occupy each other's roost areas. During December-February, when Pinkfeet may be more mobile in hard weather, there is some overlapping use made of the Pinkfoot feeding areas by Greylags from south of the Tweed. (See below). Pinkfeet are definitely more wary and easily disturbed than Greylag and their roosting, flight and feeding behaviour all underline this.

A wide variety of plant material is eaten but most of the winter feeding is done on agricultural land, stubbles and old potato fields being favoured at the beginning of the season, with increasing use of grass and winter-cereals through to spring. A smaller, lighter goose than the Greylag, Pinkfeet in small groups do not tend to produce quite so much trampling and puddling damage as the larger species, although the absolute truth of this observation may be confounded by the predominantly drier soil types (Eckford, Hobkirk, Smeilholm, Darleith series) of the Pinkfeet area, compared with the haughland alluvium and Cessford series soils often covering the favoured Greylag areas.

GREYLAG GEESE

Greylags are the progenitor of the domesticated goose and are bigger, heavier birds than the Pinkfeet and less easily agitated by human disturbance. The species has a larger world population than the Barnacle and Pinkfoot and tends to be less of a concern so far as species conservation is concerned. No feral flocks are present, so far as is known, in the Borders, although they are increasing in the Lothians and Perth. The main Border arrival is marginally later than that of the Pinkfeet—mid to late October—and their departure in March–April is earlier, with only a few stragglers hanging on until early May. As with Pinkfeet there appears to be an October/November post-migration peak and another rise in March. What is noticeable at the main eastern Border roosts is the relatively low numbers occurring at this early spring rise, compared with the high autumn figures. It is this feature which depresses the seasonal (Sept–April) means, as shown, for example, in Fig 5.

Small populations occur in Peeblesshire and the Lothians where there seems to be greater overlap between the two species than in the eastern Borders. The bulk of the Berwickshire and Roxburgh population is centred on the lower Tweed and Teviot with roosts in the Cheviot foothills. At least one important Cheviot roost was unremarked by Brotherston (1964) and Newton, Thom and Brotherston (1973). However, during the middle of winter (December–February), when Pinkfeet may be less in evidence, it would appear that the Greylags split up into smaller feeding parties (70–100 birds) to exploit stubbles, potato and roots fields well into the margins of the Pinkfeet areas. This is especially obvious along the “line” between Ednam–Eccles–Leitholm and Coldstream. Roosts also occur at Longformacus (Rawburn) and at Coldingham Moor, this latter roost having “resurrected” in recent years from pre-war use. Pinkfeet are also recorded from these last areas, but in lesser numbers.

The feeding areas for the two larger roosts are defined in one case by: Eckford–Roxburgh–Nisbet–Monteviot–Oxnam–Morebattle, with a recorded maximum of around 800 birds, and in the other by Yetholm–Heiton–Kelso–Ednam–Birgham–Coldstream–Branxton–Mindrum, with a recorded maximum of around 5,000 birds. As with Pinkfeet, precise counts are difficult due to roosting on river haughs and open fields. Small groups are also using arable areas around Ayton, Auchencrow–Chirnside and the Billie Mire gap, and there has been a definite seasonal overlap with Pinkfeet in the Hutton–Sunwick–Allanton area in the last few seasons, although the regular roosting areas for this group have not yet been discovered. Some casual river roosts occur on Whiteadder and Tweed.

The numbers using the Merse and Tweedside have gone steadily up since the sixties (Figs 2 and 4) although there are signs in the 1982 and 1983 seasons of a levelling or drop. Since the use of the single November index count might be misleading, in this regard, Fig 5 plots the numbers occurring over the monthly winter counts at the main roost. As indicated already, the low spring counts tend to mask the high autumn figures in the seasonal means. Greylag feeding has

never been analysed from stomach contents locally, but it appears to correspond to the Pinkfeet in being primarily a grazer, but with greater supplementation of its diet with roots and tuber including carrots, if available. Water-plants are regularly taken on the roosts, and Border farmers have reported efficient cleaning of potato fields and some use of turnips—for which the heavier bill is better adapted than the Pinkfoot's, although the concomitant frost damage of turnips which occurs elsewhere in Scotland does not seem to be a problem in the Region. Some rape leaves have been observed to be taken and also the tough rhizomes of Couch Grass (*Agropyron repens*) and possibly Creeping Bent (*Agrostis stolonifera*).

The main reports of damage from this species relate to overgrazing of winter-cereals and young grass, especially in wet seasons when the additional problem of puddling and compaction of the soil reduces air-space and prevents adequate spring recovery of the ground crop. The haugh fields of Tweed and Teviot are especially prone to this and soil problems on one farm which regularly hosts the autumn migration influx have continued into succeeding years even when geese have not been present. Extra cultivations, subsoiling, harrowing and nitrogen applications have been cited in various anecdotal evidence on increased costs resulting from high numbers of geese. It is unlikely that even the cumulative puddling of thousands of geese—at an average weight of perhaps 7lb (3.2kg) each could give subsoil problems. They do compact and “cap” the soil surface layers however and by reducing air exchange and by slowing drying rates they contribute to cold, anaerobic conditions in the root-zone of the developing cereal/grass plant. The worst damage undoubtedly centres on a few favoured fields which are used traditionally. Some farmers within the feeding zones welcome the potato cleaning and weeding activity of the geese.

GENERAL ASSESSMENT

From the use of count data and local observations of the last fifteen to twenty years it is clear that the agricultural damage caused by geese is worst in wet seasons at peak numbers occurring just after or just before migrations. Pinkfeet numbers have remained fluctuating about a relatively steady mean (at the November census) while Greylag have shown substantial local increase. Pinkfeet have, in the last four years, been more sedentary than was formerly the case; higher numbers staying longer, except in the extreme cold of 1981-82. This change coupled with the recent rise in Greylag numbers correlates well with the rise in winter cereal production in the eastern Borders, although no absolute causal relationship has been tested. In the Pinkfeet feeding area there is evidence of occasional severe (to the point of complete destruction) damage to winter wheat, by grazing and subsequent frosting alone. However there are only two instances of this reported to date. Damage to winter-barley occurs but usually only where trampling from feeding/resting occurs, or where young plants in a wet season, with early geese's arrival, have been plucked right out of the ground. Winter-barley appears to tiller less well than

winter wheat and so localised close-cropping has in some cases resulted in a presumed loss of yield. Greylag damage seems to have been strongly localised, but one or two farms have suffered severe sporadic losses in young grass (wet autumn and spring), and a number report depressed yield and soil compaction problems. One real problem which will arise in any detailed study of goose damage is that the Greylag areas of Teviot, Sprouston and Hutton are also used by wintering parties (up to 200 birds) of Whooper Swans (*Cygnus cygnus*) which also graze and puddle winter cereals. The swans are of course a fully protected species in law, although they may be scared off crops at will.

In considering the relationship with winter cereals one has to consider also the corollaries to the spectacular rise in these crops since 1979. There is much less grass and long ley in the region than before winter cereals became popular. There is less stock outwintering in fields, with its attendant disturbance by humans and animals. There is less growing of root-crops upon which geese used to feed. Most markedly for autumn damage, the grain stubbles now last for a very much shorter period, ploughing and sowing following harvesting in rapid succession. The stubbles that do remain are generally cleaner thanks to improved combining efficiency, and so there is less spilt-grain which occupied much of the autumn goose diet in previous years. (Remember the Oat stooks standing into November!) The lack of stubbles and of grass also have deprived geese of more robust field rest/roost sites where soil damage would not be so apparent as on young cereal fields. It seems likely that the trend to winter cereals will continue—assuming that the economics of barley production are sustained—and that the more recent trend towards oil-seed rape growing may also reveal damage problems with autumn sowing of a crop which may indeed be susceptible to goose grazing in winter. Both species of grey geese have been observed to include *Brassica* leaves in part of their diet (see for example Cramp *et al* (1977) and rape has been seen to be eaten to a small extent by Border greylags, so that effects on this crop should be noted carefully.

Under the present Wildlife and Countryside Act 1981, the opening shooting season for both species of grey geese stops on 31st January, above high water mark, so that for much of the vulnerable period of early spring, farmers have to rely on scaring devices, although there is provision for the out-of-season shooting of birds which can be proven to have been doing severe damage. Locally, farmers are rightly cautious of resorting to out-of-season shooting because of the legal implications involved in providing proof.

In view of the foregoing there are a number of remarkable features in the business of goose damage to agriculture in the Eastern Borders:

- It is highly localised, so that a few farms—and even fields—bear the brunt of any damage.
- Little research appears to be being done in Eastern Scotland into the relationships between the goose over-wintering and changing crop types.

- Few farmers try the full range of scaring devices open to them early enough, even where damage does exist at varying levels.
- Some farmers will actually scare birds off non-vulnerable stubbles and established grass on to vulnerable cereal crops and young grass!
- Many farmers do not appear to know that the shooting of Pinkfeet and Greylag is permissible in the Borders between 1 September and 31 January.

The Department of Agriculture has, in conjunction with the Nature Conservancy Council, now identified the most vulnerable Border areas for goose-damage, with a view to speeding up the out-of-season shooting licensing procedures.

It is to be hoped that a gradual clearer understanding of the relationship between over-wintering geese and their impact on agriculture will resolve some of the anomalies which exist at present. Much of any conflict will depend upon changes in our local cropping pattern, and it is interesting to speculate what sorts of new problems might arise if the Berwickshire horticultural crop or rotational grass increase in acreage. It may be that in future, sole dependence on commercial agriculture for goose feeding will have to be supplemented by a system of wildfowl refuge areas paid for and managed by conservation agencies, (see for example Owen, M. 1977).

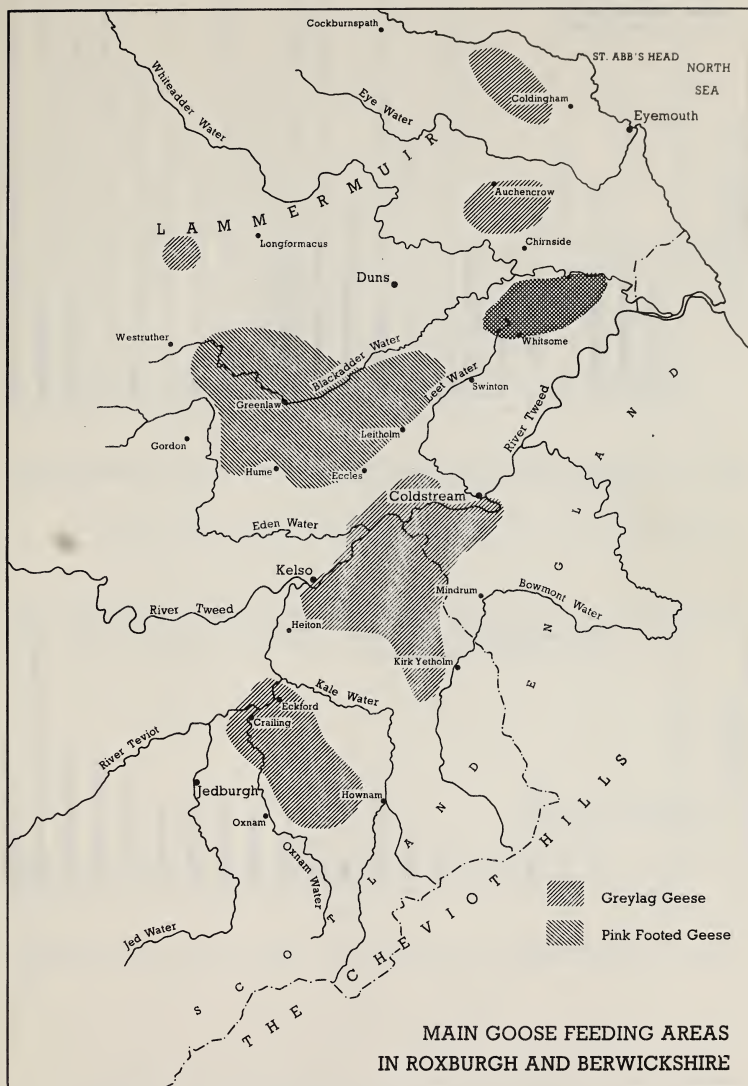
ACKNOWLEDGEMENTS

The work which is done in gauging geese numbers and behaviour can only proceed with the cooperation of farmers and landowners upon whose land—and crops—the geese may be studied. Thanks are due to all those in the Borders who freely permit access for the purposes of counting and assessment. Particular thanks is due to Lt. Col. W. B. Swan of Blackhouse for his enthusiastic support together with that of the Borders Pest Control Action Group who encouraged the present paper to be drawn together. Thanks are also due to Mr. Petrie and Mr. Cuthbert of the Department of Agriculture and Fisheries for Scotland; to Mr. D. Salmon and Mr. M. Ogilvie of the Wildfowl Trust; to Mr. J. G. Young of the Nature Conservancy Council; to Mr. Bob Noble of the National Farmers Union for Scotland and to Mr. Alan Allison of Kinross for helpful comments and advice on the draft. To these and countless others who gave their time and advice so freely, grateful acknowledgement is given.

REFERENCES

- BOYD, H. (1963)—The Numbers of Wild Geese in Great Britain. *Wildfowl Trust 14th Ann. Rep.* 1961-62, pp.87-93.
- BOYD, H. and OGILVIE, M. (1969)—Changes in the British Wintering Population of the Pinkfooted Goose from 1950-1975. *Wildfowl* 20 (1969), pp.33-46.

Mr. D. C. Souter, Detchant Park, Belford reports that on 21st October he watched a herring gull feeding on the golf course. "A mature bird, it was standing in a small depression in the grass beside the road which was very wet. After being motionless it marked time very quickly (to assimilate drops of rain, we assumed) for fifteen seconds and then waited for a number of worms to surface. It took two or three at a time and waited to see if there were any more. As there weren't it repeated the drill and ate some more. This went on for about ten minutes in our presence, when we saw it eat about fifteen worms."



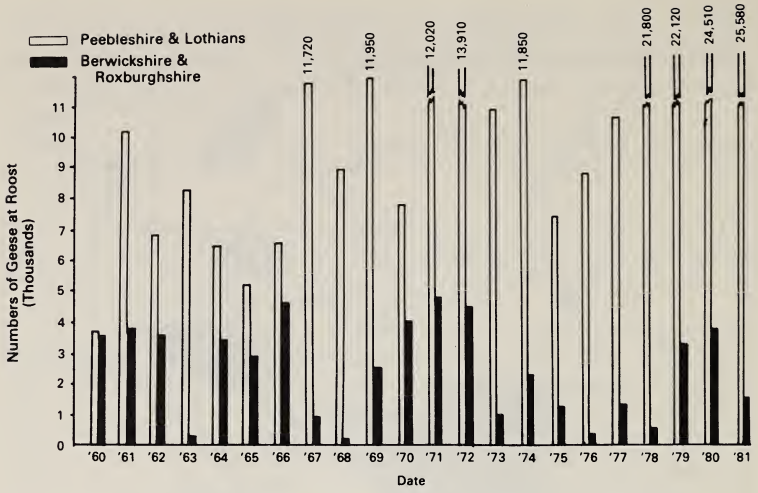


Fig. 1 November Counts of Pinkfooted Geese at roost in S. E. Scotland 1960-81

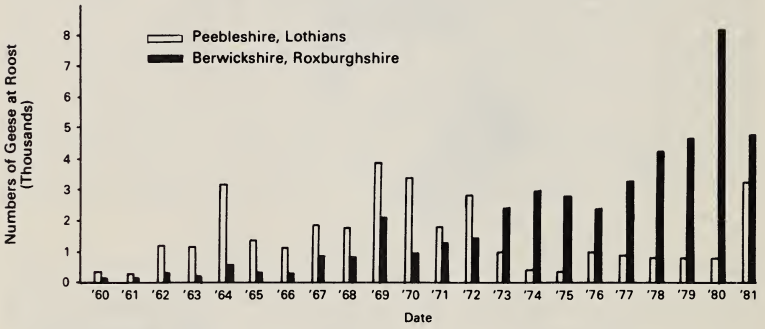


Fig. 2 November Counts of Greylag Geese at roost in S. E. Scotland 1960-81

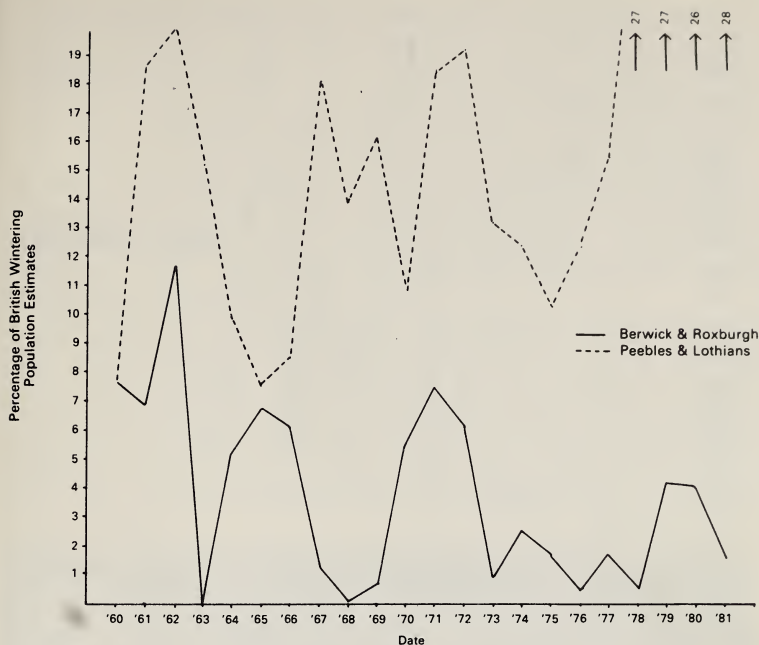


Fig. 3 November Counts of Pinkfooted Geese present in S. E. Scotland expressed as a percentage of the British Wintering population estimates 1960-81

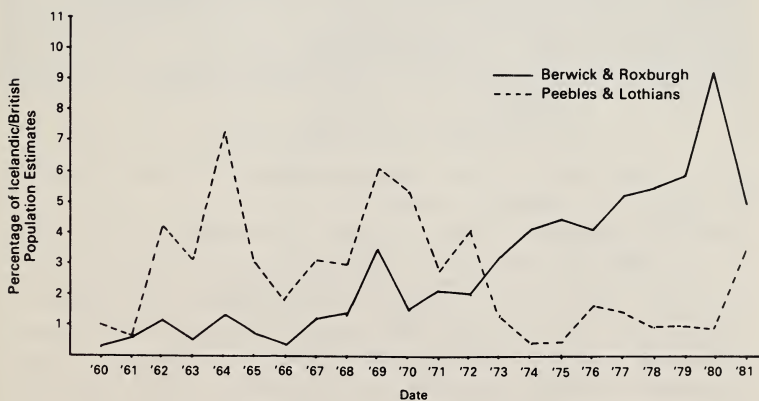


Fig. 4 November Counts of Greylag Geese present in S. E. Scotland expressed as a percentage of the Icelandic/British population estimates 1960-81.

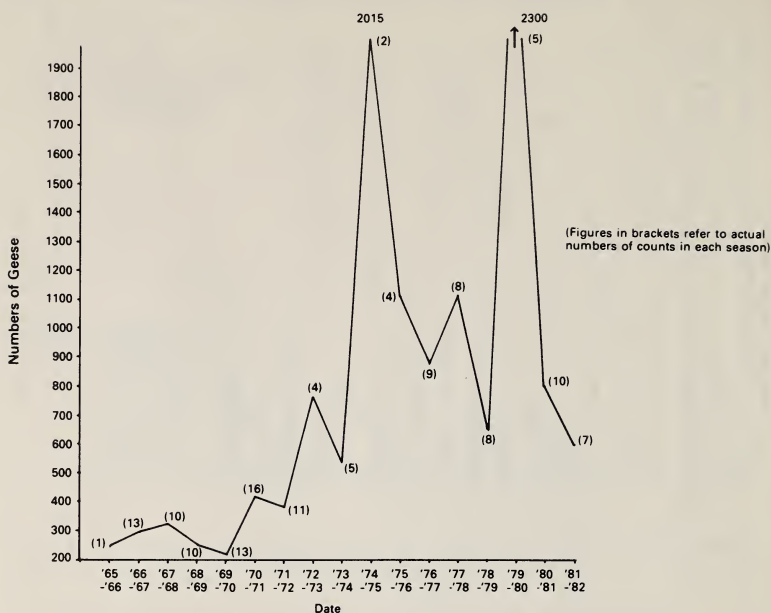


Fig. 5 Combined Winter and Spring Mean Counts of Greylag Geese at a major Roxburgh roost 1965-81.

DODDINGTON BASTLE A FOUR-HUNDREDTH ANNIVERSARY

David Morse.

The bastle at Doddington is no stranger to the Club. In 1869 the vicar, the Reverend William Procter, conducted members round the village and discoursed on the bastle. During the next year, 1870, he gave a formal address to the Club on the history of the village and had much to say about the bastle.

In 1909 a tour of the village was again arranged for the Club. By this time the bastle had largely fallen down and its ruins had been surrounded by farm buildings, but Mr. Butler of Ewart, a local landowner, who led the expedition, had an illustration available, a drawing of the intact building. The most recent visit by the Club was undertaken in 1924 when the Reverend J. G. Shotton, vicar, described how further falls had taken place since 1909. Now, sixty years on, it seems likely that few of the present membership may remember this mysterious building. The four hundredth anniversary of its erection provides an occasion for a review.

The date of its foundation, and the name of the founder, are not in doubt. A stone slab was built into the north wall under the parapet, bearing the inscription "TH GY MILES HUIUS STRUCTURE SUPTUM FECIT AD 1584" (Fig. 1) which, being translated, reads "Thomas Grey Knight paid for the building of this structure A.D. 1584". The availability of this evidence seems almost too good to be true. But it is recorded that Mr. Procter pointed out the slab to members when the building was still intact in 1869, in its position high on the north wall, and at a visit to Doddington by the Society of Antiquaries of Newcastle in 1887 Mr. Cadwallader Bates told his audience "on the north front just below the battlement is a stone bearing the inscription etc."

After the fall in 1896, the stone was rescued by Mrs. Butler of Ewart, with permission from Lord Tankerville, the owner, and kept at her home. At Mrs. Butler's death in 1937 the contents of Ewart were put into the hands of an Edinburgh auctioneer, Messrs. Dowell of 18, George Street, for sale. Since then it has not been traced. It was, apparently, not unusual for slabs of this nature to be incorporated in buildings in the sixteenth century. The character of the Latin language and of the stone carving both suggest that it is genuine and not a later forgery.

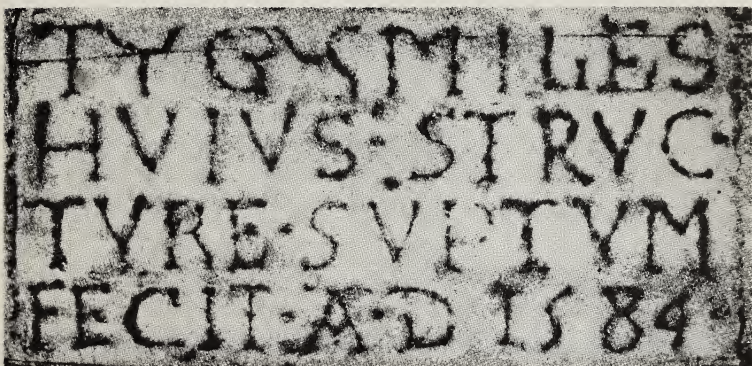


Fig. 1 Inscription formerly on Doddington Bastle.
(Northumbeland County History.)

What is a BASTLE? The word does not occur in the current edition of the Concise Oxford Dictionary so that no one need feel ashamed of being unfamiliar with it. It seems to be only in common use in the twentieth century among inhabitants of the Border between England and Scotland and to archaeologists who seek to unravel the history of buildings which are called bastles. Although the word, and words that are recognisably similar, such as bastell, occur in the enumerations of buildings near the border from the fourteenth century onwards, there is no clear warrant for its precise meaning from ancient usage. It was first used in England in the 14-15th century to describe extra wooden outworks or bastions of fortified buildings. Later it came to mean a fortified house.

The word must etymologically be derived from the French verb *BASTIR* "to build" and must be closely related to the French *BASTILLE*. Broadly, it denotes a defensible farm house peculiar to the narrow strip of country about twenty miles wide on either side of the border, and with accomodation for beasts on the ground floor and for humans above.

Why bastles were built at all along the border and particularly how the building at Doddington fitted into the general pattern are the questions which will be attempted in this paper. But first a reminder of the detail of the structure is necessary.

The plan is a simple oblong, three stories high. There is a square projection at the centre of the south side containing a spiral staircase and the entrance doorway. The roof was ridged and covered with red tiles. At either end of the roof-ridge was a high pitched gable. The projecting staircase was also crowned with a gable. The oblong plan measured on the outside, fifty seven feet from east to west and twenty five feet from north to south. The side walls, to north and south, rose to a height of thirty six feet. Each was headed with a battlement behind which was a gutter two feet wide separating the battlement from the sloping roof—in other words a walkway for defenders. The walls were three feet six inches thick. Good square masonry occurs in the staircase, angle groins and door and window dressings. There were three floors and a garret, each occupying the whole internal length and breadth of the building. The ground floor was lighted by slits six inches wide. At the west end there was a large fireplace. The ceiling was flat and was constructed of wood joists eight inches square and the floor boards of the room above. The first floor had seven windows and a western fireplace and chimney. The second floor had windows grooved for glass and again a western fireplace. The attic had windows on the east and west gables. Dormers on the south side afforded access to the parapets.

It is evident that those who had the good fortune to see the bastle in its heyday were much impressed.

On 21 June, 1887 Mr. Bates, speaking of it to a group from the Society of Antiquaries said "the tower or perhaps correctly speaking the bastle, of Doddington is one of the most recent but at the same time one of the most striking of the fortified houses erected along the mediaeval border". There is a reference in the annual report of the Council of the Society of Antiquaries in 1898 "the late sixteenth century pele of Doddington, the most prominent object in the village, a picturesque building and one of the most charming remains of Border architecture".

Although the possession of a tiled roof put the bastle centuries ahead of its time, the construction of its walls was weak and has been responsible for its downfall. The walls, of local fell sandstone, are built up with an inner and outer face, the centre being in-filled, with rubble, without any bonding stones, and, secondly, the substance with which the stones were bound together was not mortar but red hot lime. Such lime crumbles with age and loses its adhesive property over the years.

None the less the building survived for three hundred years, as isolated references show. Until 1791 it was used as the residence for the South Doddington farmer, until in that year the present existing South Doddington farm house was built. In 1860 it was used for the annual KERN, or harvest feast. In 1870 Mr. Procter reported, in his address to this Club, that it was standing almost as it stood when first erected in 1584. Before the building of North Doddington Farm house, it was occupied as a residence by the first separate tenant of the north farm. Then it was relegated to use as a granary and food store. "Now" he continues, (that is, in 1870) "the decayed state of the upstairs flooring renders it of little use". In December 1896 the blow fell: the eastern half collapsed in a gale, together with the whole length of the north wall and the eastern half of the south wall, as far as but not including, the staircase projection.

We are fortunate enough to have some photographs and a painting of the bastle which illustrate at any rate its external appearance immediately before the fall. In 1888 Mrs. Butler of Ewart photographed her father Sir Horace St Paul, standing in front of the north face. In 1880 Mr. Embleton, a professional photographer, took several photographs of the bastle, one from the south face. These last are in the property of the Club and I am most grateful to have been allowed to see them. The painting is by Richardson, one of Doddington's few distinguished sons. The subject is a pastoral scene and the bastle is seen only in the background. But the interest of the painting is that the bastle roof is red, indicating construction by tiles. In the domestic idiom of 1584, thatch by heather or straw was the universal covering, even for churches—Doddington church did not get a tiled roof till 1776 and its tiles were only replaced by slates in 1830.

Mrs. Butler, writing to the Society of Antiquaries on 15 October, 1897 shortly after the fall, draws a vivid picture of the state of the building in the previous months—"the tower, which people call the bastille, is, or rather was, a very perfect and interesting specimen of an old pele tower. It must have been used as a place of refuge for their families and cattle by the dwellers at Doddington, Fenton, Nesbit, Ewart and even perhaps Coupland. The lower storey was used by the farmer who rented Doddington for the time being as a cow byre for a number of years. But it became increasingly unsafe. A small cost THEN would have put matters to right and saved the tower. But nothing was done."

Following this appeal the Society of Antiquaries of Newcastle tried to interest Lord Tankerville, the owner, in restoring or at any rate saving what was left of the building, but nothing was achieved. Lord Tankerville wrote "I have reluctantly decided to have this bad specimen of a Border Tower, which luckily never had occasion to stand a siege, taken down". At least he was persuaded to leave the remains as they were. A plan and elevation of 1897 survives.

In 1924 there was a further fall, this time of the south wall between the projecting gable and the west staircase.

A villager remembers that in 1910 the bastle first floor beams of black oak were taken from the building by Lord Tankerville.

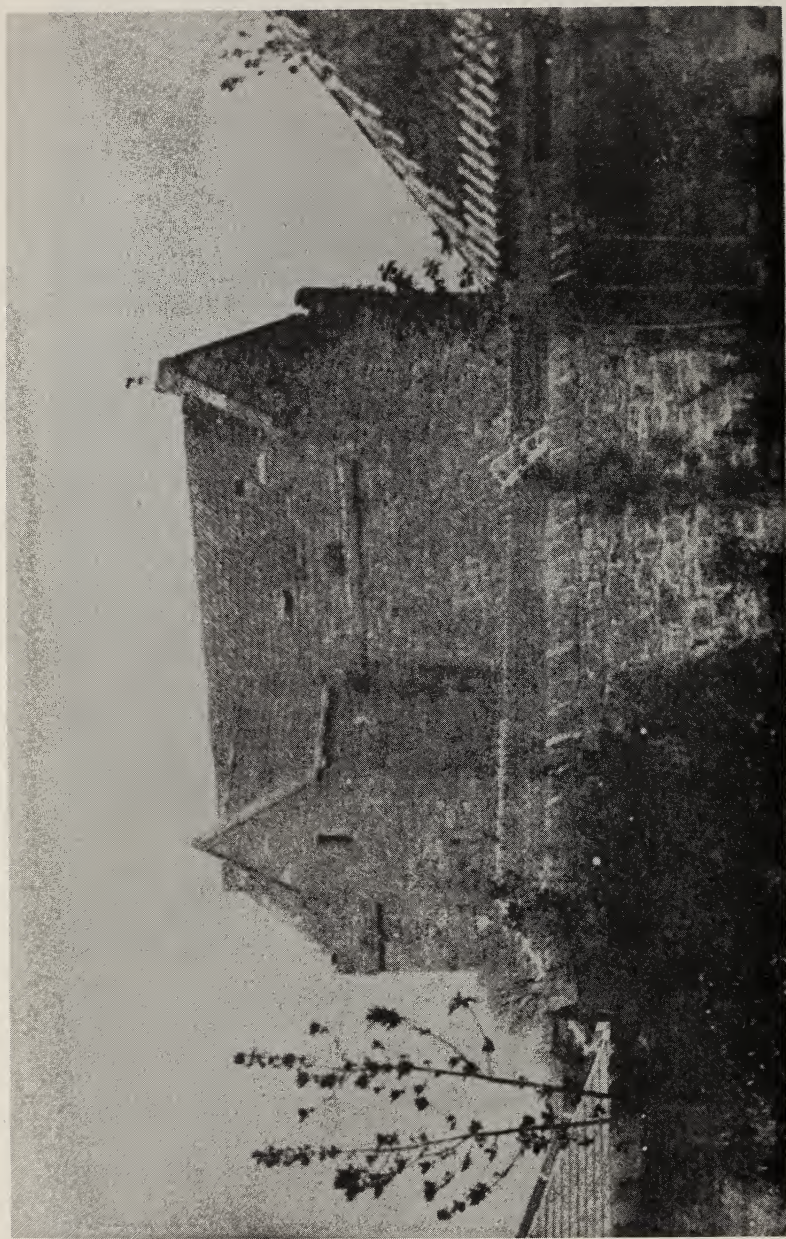


Fig. 2 Doddington Bastle as it was before 1877. (From an original photograph in a grangerised volume of the Club's History; copy by Revd. H. S. Ross.)

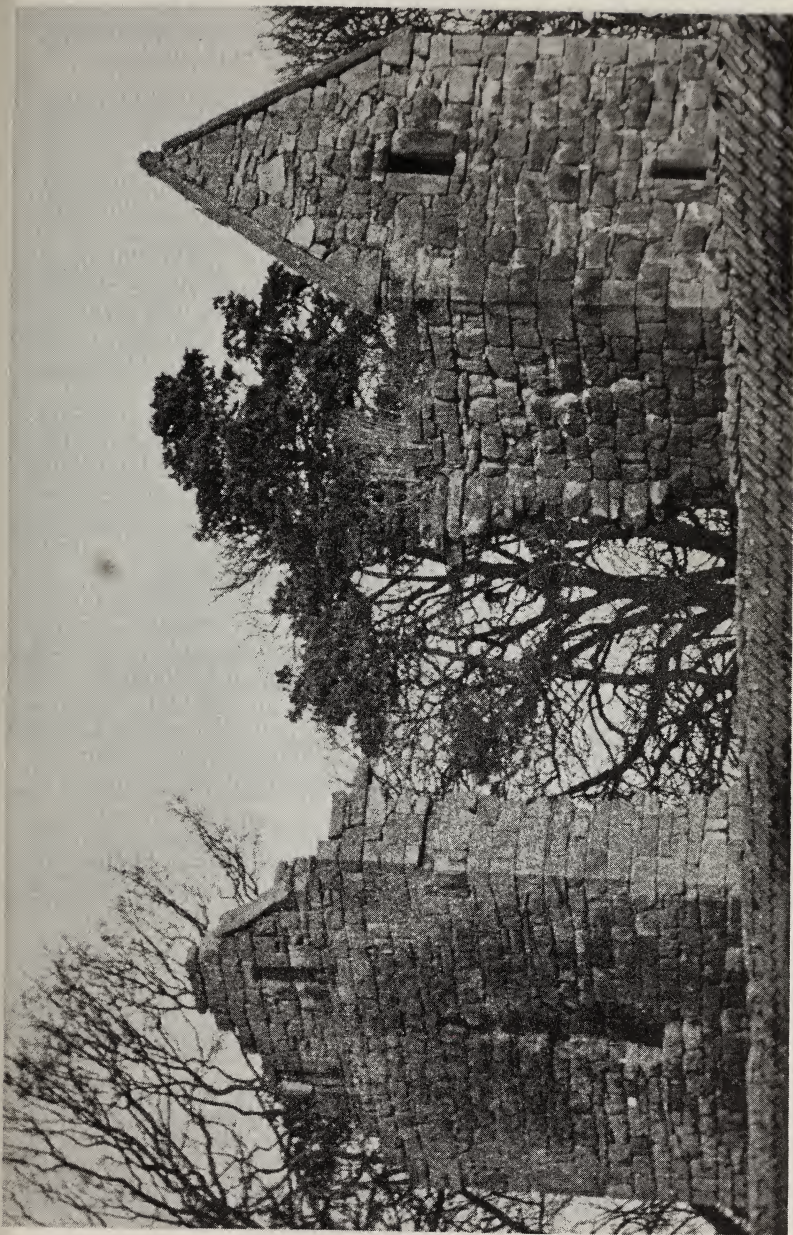


Fig 3 Doddington Bastle from the southwest in 1979. (Photograph by Andrew Steele.)

In 1941 Mr. William Wilson acting as air raid warden for the neighbourhood was woken by what he thought was a bomb. After giving the alarm and rousing the rescue service he discovered that the noise had been caused by a spontaneous collapse of the upper part of the west gable.

In 1979 I noticed myself that some parts of the north west buttress had fallen away. In fact, at the time of writing there will soon be further collapse. Daylight can be seen showing through the centre of the west wall for most of its height. This probable final collapse is another reason for a review of the building and its history, while there is still something to be seen of the original structure.

The builder, Sir Thomas Grey, of Heton, Wark and Chillingham was a man of substance. In the muster of freeholders and tenants within the East Marches, taken on 10th March, 1579, it is recorded that 21 villages were owned by him, representing 300 tenants, 129 horsed, including the village of DODENGTOUN with 29 tenants, 10 horsed.

He was High Sheriff of Northumberland in 1574 and a Border Commissioner who assisted in drawing up a report in 1582 on the condition of the castles and towers between Berwick and Harbottle. In this report (as in the previous reports of 1482 and 1541) there was no mention of a fortress at Doddington. It is evident that, instead of repairing the decayed towers at Fenton and Nisbet, he built a fresh defensive bastle at Doddington in 1584 to replace them.

The connection between the Grey family and the land of North Northumberland goes back several generations further.

Another Sir Thomas Grey who fought at Bannockburn in 1314 held the Manor of Heton and was granted lands at Howick in 1318. His grandson, Sir Thomas, acquired Wark in 1398. John Grey, a younger son of Sir Thomas of Wark was granted the title of Earl of Tankerville in 1419 for military service in France by King Henry V. But the title was forfeited by his son Henry Grey for disloyalty in 1449.

Sir Thomas of Wark's eldest son Thomas had himself a son, the first Ralph Grey, who with his wife was buried in the magnificent tomb at Chillingham in 1443. The Greys now became styled "of Heton, Wark and Chillingham", but how the title to Chillingham was acquired remains obscure.

Sir Thomas Grey who built the bastle is the direct descendant of Sir Ralph Grey of Chillingham, in the fifth generation.

The ownership of the village of Doddington by this family is recorded certainly as far back as 1368 when it was held from Henry de Percy for half a Knight's fee.

The village continued in the same ownership, with one hiccup, until South Doddington Farm, which included the bastle, was sold in 1924 and North Doddington Farm in 1944. During this period of around 350 years, Sir William Grey was created Lord Grey of Wark in 1619. The title of Earl of Tankerville was revived for Ford, 3rd Lord Grey of Wark in 1695. This first Earl of Tankerville had a daughter but no male heir. She married Charles Bennet, Lord Ossul-

ton and in 1714 he was created Earl of Tankerville. The Lord Tankerville in whose day the castle fell down in 1896 was the 9th of the name Tankerville, but the family name is now Bennet and not Grey.

A glimpse of the part that Sir Thomas Grey played in defence of the border on the English side may be won from "Rules for the Defence of the Borders" dated June 1583 which occurs in the Contemporary Calendar of State papers:—"the fifte and laste places accustomed of defence for soldiers to be in, nexte to Harbotle, is Woller, Newton, Pawston, and Downeham, all in the Easte Marches, which, with the helpe of Sir Thomas Grey and horseman of Warcke, and other of that contrye, are able to at all tymes in peace, with one or two bands of the garrison of Barwycke, to keep in the Yongs, Tates, Pringells, and other the Tividalls, whensoever they begin to radge, and dryve them to forsake their own houses, and whole townes of bothe Yatehams, Heyhope, and Cheretrees, as not long since yt hathe been done with little charges to her Majestie".

At the same time there was considerable distrust of the owners of land in North Northumberland.

They waged feuds against each other.

In 1574 Francis Dacre's house in Morpeth was beset by Lord William Howard with 120 men procured by Ralph, brother to Sir Thomas Grey. In the same year William Selby of Berwick set on Robert Clavering and killed him. Sir Thomas Grey complained of William Selby to Chancellor Walsingham. Cuthbert Collingwood was "extremely dealt with" on an occasion when Sir Thomas Grey was involved.

Also they were suspected of leaning towards papacy and of austerity towards their dependants. In this connection a "Note on the Gentry of the Borders" dated 1587 taken from the "Calendar of State papers" states:—"most of those in Northumberland are cruel oppressors of their tenants, and as a service, there would be a great want of both horse and foot. The greater part of the gentry are papists or addicted to papistry, as Sir Cuthbert Collingwood, Sir Thomas Grey, and his brother, Ralph of Haggerstone, and Mr. Phenicke of Wallington, a suspected priest. Cuthbert Armourer knows and told Sir George Carey how many of these entertained Brierton and other Jesuits. No one in the town or garrison of Berwick can be justly charged with being a papist, anabaptist or undutiful subject."

The narrowness of the Neck of Britain which joins what is now England to what is now Scotland must be the reason why it has always been the frontier region.

Within this neck of land, stretching roughly seventy miles from north to south, and seventy miles from east to west, there were geographical features which settled where a permanent border would emerge, that is, if it was to be a defensible line in a neighbourhood torn by national and clan rivalry.

Occupying the middle two thirds of this frontier region is the watershed of the Cheviot range, running from north-east to south-

west. But there is no natural barrier continuous with either end of this middle section. The western extremity became the "debateable land" where during the centuries of warfare until 1552 a thirty mile wide strip was, vaguely "the border". At the eastern extremity, the lower reaches of the Tweed were a natural barrier. But since the Tweed does not arise from the Cheviots but from Scottish hills further north, there was a dangerous gap between the river and the Cheviot range. Here the only natural defence was the marshy plain watered by the river Till as it flowed northwards from the eastern foot of the Cheviots to its mouth in the Tweed at Tillmouth.

To reduce the width of this weakly defended gap, the border was drawn in a line across the shortest possible distance between the Cheviot itself and the river Tweed. This meant that the border, otherwise travelling in a continuous south westerly direction from Berwick to the Solway, was bent through a right angle twenty miles up the Tweed at Wark and thence travelled south-east across the plain to the summit of Cheviot where it once more took a right angled turn to continue its course south-west. To guard this stretch there was a line of fortresses on the English side, Wark itself, Downham, Mindrum, Kilham, Hethpool, Akeld and, most southerly, Doddington.

From Doddington the line continued along the eastern and southern slopes of the Cheviot range, where the inhabitants, and therefore their fortresses, tended to be in the river valleys as these waters emerged from the watershed; from east to west, the valleys of Till, Aln, Coquet, Rede and North Tyne.

As the guardian in this key position, Doddington has geographical advantages. The fell sandstone ridge behind it, that is to say to the east, protects it from the south-east gales from Howick Hole. Sandstone is excellent building material. All the village, including the church and the bastle, is built of it. It has been used far afield for important public buildings, as the Edinburgh War Memorial. Today the stone is principally in use for road construction. Springs are plentiful in rock of this geological character.

The village is today, and always has been, watered by at least four named springs, the Dod Well, Cuddy's Well, the Blind Well and Blunty's Well. One of these, Cuddy's Well, flows at the rate of seventy-two gallons a minute, sufficient to drive a mill and grind the villagers' corn. The rate of flow of these streams has been constant since recorded time as also has their temperature and salt content, regardless of the weather. Fell sandstone is porous. The water that falls on the hills as rain soaks in deeply and does not appear as spring water for many years. It is said that people come from miles around to drink the water and that the Blind Well is the sweetest of them all because it flows to the south.

The water-meadows of the marshy plain to the west—much more marshy in the sixteenth century before they were drained and therefore much more of an obstacle to invading Scots—are good corn land. Geese in their thousands winter here from October to March, mostly grey-lags and some barnacles. They are a source of food and give warning of marauders from the west.

The lower slopes around the village and to the east support cattle and sheep. There are indigenous woodlands, Sycamore and Scots fir. The sandstone moors are crowned with peat for fuel and there are coal measures in the carboniferous limestone between the fell sandstone and the east coast.

It is sometimes asked why a fortified house was built so late in the centuries of border warfare. Certainly it was not a repair or reconstruction of an older pele since Doddington gets no mention in the catalogues of 1460, 1541, or 1582. It may be, as already mentioned, that Sir Thomas Grey substituted it for the decayed towers at neighbouring Fenton and Nesbit which were therefore not re-built.

Another attractive and possible explanation is that there was already a fortified position in Doddington, that is to say, the church. It was quite usual, particularly in the thirteenth and fourteenth centuries, when stone as a building material was even more expensive than in the sixteenth century, for churches to be built with a strong and defensible western chamber or alternatively to have such a tower added to the west end of an already existing nave. This would be a cheaper and more widely supported and, indeed, stronger defence for a small community. Examples are Ingram, Longhoughton, Edlingham and Ancroft. Architecturally, Doddington church, certainly a building of the thirteenth century, has always puzzled students of ecclesiastical building.

The nave is divided into two unequal halves, the western section being the smaller. The arch dividing them is certainly of thirteenth century construction. No purpose for such an apparently unique division has ever been offered. Could the western part have been a defensive western chamber? But more of this if ever the history of Doddington church comes to be reviewed for this Club.

This is no place for an essay on Border warfare. To a foreigner from the South of England it is still puzzling that a conflict which began with Agricola in 80 A.D. should still continue into the late 20th century; and that the intervening two thousand years should have seen periods of quiescence of the animosity between north and south and periods of activity. But never, until the 18th century, peace.

Even now, at a national level, there is agitation that Scotland should have had a separate Parliament, that revenues from oil and gas recovered from the sea off the Scottish coast should not be shared with England, and that Berwick-upon-Tweed should be returned to Scotland after 502 years of English occupation.

Among people living along the border there is an undercurrent of feeling that they live where two countries meet and that they should keep to their own side.

The motive was certainly not an agricultural one. The arable land on both sides of the Tweed is rich, some of the richest in Britain. Neither party had a need to steal from their neighbours in order to survive. Both Teviotdale, north of the Cheviot and Tynedale to the south are comparable pastures of high quality.

For the first few thousand years the motive seems to have been the arrival of new peoples bent on invasion and conquest, successively,

the Romans, the Anglo Saxons, the Vikings and the penetrating infiltration of the Wessex Kingdom from the south.

With the Norman Conquest of England and the consolidation of Scotland by the union of Picts and Scots the picture changed. It was now England against Scotland, with the two rival Royal Houses seeking to occupy the other's country—as far as the Antonine wall on the Forth-Clyde isthmus in the north and as far as the Tees-Ribble line in the south. This ebb and flow continued until the Union of the English and Scottish crowns in 1603.

It was inevitable that the inhabitants of the heartland of the disputed country should lead unsettled lives and should skirmish with each other, not only Engländer against Scot, but valley against valley and family against family. In the uplands of the Cheviots the conception of clans arose in the fourteenth century, extended families consisting of men of the same surname. The principal names were, on the Scottish side, Graham, Maxwell, Armstrong, Elliot, Scott, Pringle and Kerr and on the English side, Robson, Charlton, Heron, Milburn, Ridley, Hall and Grey. The members of a surname pillaged together, defended each other, and exacted vengeance as a unit.

With the introduction of Protestantism under Henry VIII, the motive of religious intolerance was introduced and was responsible for some of the bitterest and most unlikely enmities. In such a state of permanent unrest it became necessary for the inhabitants to fortify their homes. There is such a wealth of confusion about the precise meaning of the names given to these fortified houses, both at the time they were built and now, in the twentieth century, that a writer can only state his view and take his chance against others.

It must be common ground that:—

The builders were basically farmers and villagers and not soldiers and therefore their buildings were places of refuge and not military keeps to house trained soldiers: Also that the builders were "surnames," a larger unit admittedly than a family, but not large enough to have the resources to construct anything but the simplest barrier against attack.

Garrisons or detachments of soldiers, employed for the purpose of repelling organised military operations from over the border were maintained and housed by the Wardens of the Marches in their castles, Chillingham, Carlisle, Warkworth, Berwick, the Hermitage, usually at the expense of the crown.

As the centuries passed, the nature of the buildings altered, although still constructed for the same purpose—particularly with the substitution of stone for wood and earth. Meanwhile old names survived and took new meanings with the change in building practice.

In Documents of the 13th and 14th centuries the buildings are called PELES and it is revealed that they were "a place of strength, the defences of which are earth mixed with timber and strengthened with palisades." The word 'Pele' is said by many writers to be derived from the Latin "PILUM" meaning a stake. But in classical Latin the word for a stake is PALUS and not PILUM and this difference makes it more understandable that PALISADE, that is, a

series of stakes, should come to be known as a PELE. In several of the references to PELES of the 14th century it is clear that the central building, a mound of earth, natural or artificial, was surrounded by a moat, or was an island site or was within the bend of a river.

Fire seems to have been the greatest danger from an enemy. In the early 16th century the accounts of pele construction emphasize the manner in which destruction by enemy burning may be lessened. For instance, John Leslie, Bishop of Ross, writes of the customs of Scots on the Border "that while the greater part of their houses were cottages and huts so wretched that they did not care whether these were burnt or not, the more powerful among them constructed for themselves pyramidal towers made of earth only, which could not be set on fire nor be destroyed except by the labours of a considerable armed force, and that to these earth-towers they gave the name of pails."

About the time of the "Border View of 1541" the change from wood and earth to stone occurred first among the richer farmers and was later called towers, but the old word pele was retained for the lesser fortified buildings: and the outer palisade was gradually abandoned.

During the sixteenth century the word "bastle" begins to emerge to describe a building of stone intermediate on size and degree of fortification between the smaller pele and the larger and grander tower. Akeld of 1522 is the earliest stone building to be called a bastell by the Border Surveyors of 1541, Hebburn bastle followed in 1541, Queen Mary's House at Jedburgh followed in 1566, and Doddington in 1584.

To summarise: before 1520 fortified houses in the uplands were built of wood and earth and were thatched with heather or straw. They do not survive. After 1620 there was no further need for fortified houses on the border. The period therefore of stone-built fortified houses consists in the hundred years 1520-1620.

Within this period there were built, at various dates, fortified houses of three degrees of size and elaboration.

First, the smallest, peles, measuring 35×25 feet. They were simple rectangles of two stories with a high pitched roof containing a garret. There was a lower door in the gable end and an upper door in the long side. The lower chamber had only slits for light, being intended for occupation by farm animals. The ceiling was vaulted and of stone, to prevent damage by fire from below to the upper chamber.

Second, bastles. A building twice as long as a typical pele but of the same width. Three stories and a garret within a high pitched roof. There was a projection on one of the long sides for a spiral staircase. The walls were three to four feet thick and there were bars to the windows. Battlements were unusual but were present in Doddington Bastle.

Third, towers. These are more strongly built. Larger than bastles, often with more than three stories, capped by battlements. Often there is a projecting side wing, so that the building has an L plan. These buildings vary so much in shape that their difference from

bastles is really that they lack a simple plan, and they are generally larger and stronger.

I should like to acknowledge how much I owe to "Fortified Houses on the Anglo-Scottish" by Dr. Philip Dixon of Nottingham University.

SOME UNRECORDED NATURE NOTES 1973-1983

Grace A. Elliot.

1973.

The habits of many insects are known to us by reading about them, but seeing them happen is different. The following surprising and unusual records taken from my Nature diaries of recent years may be of interest.

1. The Doctor's card with new consulting hours and telephone number lay on a brass table in the sitting room, its cover being of a shiny plastic paper, beside it was a shopping list. Next morning both appeared with holes in them. During the next night the Doctor's telephone number, and part of the typescript on a letter had entirely disappeared, the paper being eaten into holes. This was puzzling at first but the answer came in following a faint slight dry trail to find a large snail nestling at the foot of a pot of primulas which had been brought in from the greenhouse where they had wintered. Not having any special literature on Gastropods, it can only be concluded from the snail's lovely shell of red, yellow and brown stripes, that it was a specimen of the White-lipped garden snail, called *CEPAEA hortensis*. (See Richard Adam's 'Nature by Day and Night').

2. 1977. 23rd August. After a picnic lunch by the side of the road leading over Coldingham Moor above Silverwells, some curious larvae which looked like bird droppings were discovered on Thistle leaves; they moved so we took some home and put them under the microscope. No heads were visible and the bodies were slug shaped, but flatter, and wider, and of a dark green, black and orange brown, also a very dark spine lay across the centre of the back while at the bottom were what appeared to be 'a curious pair of long tails which are carried over the back' (see B. M. Natural History). Actually to us these tails looked like orange tubes sticking upright and from which the larvae spewed excrement over the whole body, as a kind of mask or as an act of protection from predators. These extraordinary larvae proved to be those of the common Tortoise beetle, *Cassida virides* which normally feed on thistles. (See 'Oxford Book of Insects')

3. 1978. 20th June. A friend showed us a nest which he had found lying under dead twigs at the edge of the wood south of Ilderton old railway station, and where a pheasant-like bird sat quietly on about fifteen eggs. Its red eyes, white throat edged with black feathers and its red legs proved it to be the French or Red-legged Partridge, a bird not usually found in this part of Northumberland. Some books give it no further north than Yorkshire, yet last week it was reported in the 'Press and Journal' (June 1984) that a pair had nested and brought up chicks in Aberdeenshire.

4. 1979. 17th May. A Meadow Pipit's nest with four eggs was found on the links at Scremerston.

5. 12th June. The sun shone for sixteen hours so an evening walk was taken by Skirlnaked, where the toadstool *Coprinus plicatilis* was seen by the river bank, showing its pleated cap and central brown dimple like a Japanese umbrella.

6. 1980. 30th July and throughout August Painted Lady butterflies were seen on thistle flowers near the Diamond burn as well as flying near Routing Linn.

7. 1981. 19th September. From the Lowick-Ford road a side road with Gorse bushes on its verges leads to the old coal mine and the modern Nature Reserve. The flowers on the Gorse are dead and grey in September uninviting to any sort of live stock, yet on one bunch there clustered several dark grey beetles similar in size but flatter than a Seven spot Ladybird. On taking some home with dead flowers and young sprigs of Gorse, it was noticed that they did not try to fly off when disturbed but remained close together. They were obviously one of the *Hemiptera* families and from this behaviour probably those called 'Parent Bugs' which Insect books give as *Acanthosomidae Elasmucha grisea*, a form of Shield bug. Unfortunately rarely do the books fully describe any as to colour, and photography generally is not very detailed, however when looked at under our old microscope we discovered how beautiful they were.

The head is blackish with two white marks on it and at each side a large yellow eye; the black lined triangle of the scutulum enclosed horizontal stripes of yellow, red and black which continue under and down to the bottom of the wing cases which resemble a waistcoat and are themselves black and covered with creamy coloured spots, the whole appearance to the naked eye being dark green. The abdomen itself is yellow and covered with black dots, the darkest being central to the bottom. Round the body are alternate black and orange marks finishing yellow at the neck. The underside of the abdomen is equally beautiful, bright yellow with four orange curved lines running from side to side, while below each line are three large black spots surrounded by many small ones. The tarsi are two segmented.

8. 27th May. A 22 *Punctata* Ladybird was found on birch leaves at Routing Linn. The Black spots on its yellow body make a striking picture.

9. 1982. 14th October. Forty fully grown Fox moth Larvae were counted on Scremerston links as they lay sunning themselves on the bright autumn leaves of low plants.

10. 2nd November. The last Red Admiral butterfly appeared on our pear tree. This brings us to 1983 when records were equally rewarding, the most important being found in April and November.

11. 1983. 9th April. On the beech hedge near the car park in Ford Castle gardens a host of seven spot Ladybirds were seen.

12. 20th April. A Land Bug known as the Hawthorn Shield bug appeared on a young cyprus tree in our garden.

13. 24th July. A young *Adalia* ten spot Ladybird was found on our Sitka spruce, black with ten yellow spots.

14. 8th November. On the same Sitka spruce a tiny beetle was found not more than $\frac{1}{4}$ inch long. It was black with a narrow thorax and plumper abdomen, the bottom of which was a greyish white colour. It was found in the under side of new small spruce twigs sucking apparently from the under joints of the needles with the twig. We wondered at first if it was one of the dreaded Spruce beetle known as *Dendroctonus mecans* mentioned in some newspapers not long ago, but we were thankful when Mr. Stoakley, the Forestry Commission Entomologist for the North, called the beetle 'a species of aphid, *Cinara pilicornis*. A species which does not normally occur in large numbers and therefore is not harmful'.

The remaining records for 1983 are as follows.

15. 1983. 15th April. There emerged from the pupa of a Stick larva found on a rosebud on June 7th 1982 the pretty little moth *Lampronia capitelle*, known today as the Currant Shoot Borer but once called the 'Spotted Black Bright'.

16. 23rd July. The *Pterophorus pentadactyle*, the lovely white Plume moth which feeds on Convolvulus plants was flying in the garden.

17. 27th July. Another Plume moth *Agdistis bennitil* was seen hovering on the road side coming from Alnwick.

18. 7th August. A Garden Tiger Moth flying in the garden, not often seen here.

19. 25th August. Adders Tongue fern found again on Scremerston links.

20. 6th November. A Plain Silver Y moth emerged from a pupa of larva taken from garden parsley on October 3rd 1983.

HOGG versus SCOTT

Shepherd against Sheriff

Rev'd. Dr. Robin Pagan, B.A., B.D., D.Min.

(This is an extract from a project in ministry in the Border area undertaken in 1981/83 entitled "Towards an Enabling Ministry." It is concerned with the socio-political implications of the relationship between Sir Walter Scott and James Hogg the Ettrick Shepherd. To quote Dr. Pagan: "The discussion is set in the wider context of how people are silenced, made voiceless."—Ed.)

The friendship between Scott and Hogg illustrates the process of how traditional myth, supportive of the status quo, is created and becomes the established and received truth. In this case the process begins with the nature and background of the men themselves. Scott was the son of a professional city family with ambitions not only for literary success, but in attaining also to the ranks of the Border aristocracy; a man whose instinct seems to have been to dominate and patronise. Hogg was the son of a Border shepherd and himself a shepherd who through a natural and inherited talent from his story-telling mother, plus the assistance of Scott, won his way on to the literary scene and remained forever beholden to the latter. This first stage of the myth-making process, no doubt largely unconscious on both sides, stemmed from the received values of their social milieu. The relationship is summed up in Simpson's critical work on Hogg, thus:

Scott respected Hogg's talent and had great affection for the man; Hogg held Scott in something like adoration, and applied to him for advice.¹

Already the patronising, subservient relationship between the two men is beginning to emerge. This differential in their relationship is then taken up by their "genteel" friends who convert Hogg into a rural literary character, or rather caricature, as Simpson notes:

In 1819, John Wilson began to assume the main editorial work on *Blackwood's Magazine*. . . . In March 1822, the magazine presented the first of the *Noctes Ambrosianae*, a series of dialogues on which has been founded the popular idea of Hogg as a quaint, uncouth, boozing, strangely talented shepherd—in effect, the Shepherd of the *Noctes*.²

That Hogg himself was not persuaded of any basic resemblance between himself and the caricature outlined by his contemporaries is made obvious by a letter of complaint to John Wilson:

I am exceedingly disgusted with the last beastly *Noctes* and as it is manifest that the old business of mocking and ridicule is again beginning.

Here we witness established society protecting itself from the threat it apprehends to its values and norms, in this case a talented author of low class origins seeking recognition in literary, and by

¹L. Simpson, James Hogg, *a Critical Study* (Edinburgh & London: Oliver & Boyd, 1962) p.10

²Ibid. p.34

³Ibid. p.37

implication, social terms also. In such circumstances any means are justifiable in the business of belittling the stature and integrity of an adversary.

The process of myth-making is completed and sealed in favour of the established, authoritarian and aristocratic society of the time, by J. G. Lockhart, the biographer and son-in-law of Scott. In this biography, each of the several references to Hogg is characterised by the iron fist of belittling mockery, carefully enwrapped in the velvet glove of gentility, as the following extract illustrates:

The next time that business carried (Hogg) to Edinburgh, Scott invited him to dinner, in company with Laidlaw, who happened also to be in town, and some other admirers of the rustic genius. When Hogg entered the drawing room, Mrs Scott, being at the time in a delicate state of health, was reclining on the sofa. The Shepherd, after being presented, and making his best bow, took possession of another sofa opposite to hers, and stretched himself thereupon at all his length; for, as he said afterwards, "I thought I could never do wrong to copy the lady of the house".¹

It would be interesting to have Hogg's version of this event. That he did have an independent viewpoint and was not the society puppet Lockhart would have us to believe, is illustrated by the following encounter which took place between Hogg and Scott; interestingly, the point of conflict being the interpretation of their common history. Simpson notes:

Upon the publication of his novel, *The Brownie of Bodsbeck*, Hogg found himself in direct opposition to Scott, and for once he stood on his hind legs and fought back. . . . He called upon Scott on the pretence of asking his advice, but actually to get his opinion of (the novel). He found Scott in no genial mood: "His shaggy eyebrows were hanging very low down, a bad prelude, which I knew too well." "I have read through your new work, Mr Hogg," said he "and I must tell you downright plainly, as I always do, that I like it very ill—very ill indeed." It was, Scott said, "a false and unfair picture of the times and the existing characters." To this Hogg answered that it was the picture he had been bred up in the belief of ever since he was born; all the incidents, he could prove from history, were true.²

Scott the aspiring aristocrat of Abbotsford, Hogg the grateful dependant, carefully caricatured by his "betters" as the rustic shepherd are at last seen in their true colours:

Scott . . . reiterated his objection: "With the exception of the old Nanny, the crop-eared Covenanter, who is by far the best character you ever drew in your life, I dislike the tale exceedingly, and assure you it is a distorted, a prejudiced and untrue picture of the Royal party." "It's a devilish deal truer then yours though," Hogg fired back, "and on that ground I make my appeal to my country."

On all this Simpson makes the following comment:

Scott, who had a portrait of Claverhouse hanging on his wall, was not likely to be pleased by Hogg's description of "Clavers" as a kind of hell-hound, savaging the Covenanters. Hogg's was a popular view; Scott's was Tory . . . Hogg's sense of history was located, so to speak, in his viscera; he was closer than Scott to the currents of feeling that make the true history of the people.³

The story is one which illustrates the silence of deference which the lower classes have learned to keep, albeit with occasional outbreaks of protest which only go to prove the general rule. This ambiguous relationship is one which is still alive today, a critical deference to authority, whatever its origins, which recognises silence as its safest policy, if not the last word!

¹J. G. Lockhart, *The Life of Sir Walter Scott* (London: J. M. Dent & Co., Everyman Edition, 1906) p.120

²Simpson, 42f.

³Simpson, p.43

BERWICKSHIRE POSTAL SERVICES, 1793

T. D. Thomson

In a recent issue of the Bulletin of the Postal History Society Mr. Ron Stables reported on his examination of a summary of postal services in Scotland prepared in 1793 for the Postmasters General. From this I have extracted what seems relevant to Berwickshire.

The main line of communication was, as it has been for so long, the Great North Road. There was a daily mail coach—seven days a week—from Edinburgh to Berwick and so to London, passing by Haddington, Dunbar and The Press, these being the staging points. The Press had taken the place of Auld Cambus in 1768, and the latter had superseded Cockburnspath about 1734, so this was a long stage. The mail guards between Edinburgh and Berwick were paid a total of £81.18/- per annum, and the Postmasters at The Press and Berwick received salaries of £15 and £50.6.8d respectively.

Dunse and Greenlaw were served on three days a week by runners from Berwick at an annual cost of £23.8/-. There is evidence here that this summary of services was prepared before local agitation led to the Dunse and Greenlaw mails being routed via Ayton, where a new office was opened in 1793 (the whole story may be found in HBNC XXXVIII at p.182). The Postmasters had salaries of £22 and £6.10/- respectively.

There was a horse post from Berwick to Kelso, delivering and collecting mail at Coldstream on the way, on three days a week (this service continued to Hawick where it linked up with that from Edinburgh to Langholm). To and from Kelso the post cost £48 per annum and the Postmaster at Coldstream had a salary of £10. The other outlying service was the thrice-a-week footpost between Stow (on the route from Edinburgh to Moffat and so to Carlisle) and Lauder, at an annual cost of £7.16/-; the Lauder Postmaster received a salary of £6 (his colleague at Stow had £4).

For the rest of Berwickshire there were no official postal arrangements in 1793 until the Eyemouth office was opened later in the year, and private activity must have filled such need as then existed.

THE VEGETATION OF TWO ROXBURGH MOSSES

Graham D. Bell

This paper describes the distribution of vegetation types on the wetlands at Woodhead Moss, Ancrum, near Jedburgh, and at Adderstonlee Moss, Kirkton, near Hawick.

Introduction

Woodhead Moss (NT6126) and Adderstonlee Moss (NT5311) occupy the sites of two former small lakes, which are now infilled with lake sediments and peat. Both are Sites of Special Scientific Interest, Adderstonlee Moss being of Grade 1 importance as defined by Ratcliffe (1977). Woodhead Moss is situated in a shallow basin that is curiously perched above the valley of the Ale Water near its confluence with the Teviot, but lies below the crag and tail of Gersit Law and Lilliard's Edge. The basin is lined with Devensian glacial till consisting largely of eroded Old Red Sandstone, which forms the bedrock under this area. The organic sediments now filling the basin are about three metres deep, and extend over some 11Ha. The Moss is completely surrounded by improved agricultural land under barley, pasture or coniferous plantation, and the water level in the mire is controlled by a ditch leading to the field drains, there being no surface flow inward or outward.

Adderstonlee Moss, a larger moss some 14Ha in size, and lying to the south east of Hawick, is of a contrasting character in many respects. It lies in a broad depression lined with locally-derived, stony grey till, in upland to the south of the Teviot valley. Like most of this area, the surrounding hills are "corrugated" (Ragg, 1960), as variations in the hardness of the steeply-dipping Wenlockian (Silurian) shale bedrock have been exploited in the past by glacial erosion. Drainage from this mire is northwards through a deeply cut channel, probably of fluvioglacial origin though modified substantially by man. A location map for both sites is given in Figure 1.

The vegetation of the moss at Woodhead ranges from reedswamp to dense *Alnus* and *Salix* carr and rich fen, arranged approximately concentrically around the remaining small area of shallow permanent standing water. At Adderstonlee, the mire area is dominated by an extensive *Betula* and *Salix* carr, with a *Carex* lagg area to the west of the site.

From the range of species that occur at each of the sites, they can both be broadly characterised as mesotrophic, with Adderstonlee having, in addition, a central oligotrophic area within the *Betula* carr, and this impression is confirmed by Daniels' (1978) key to British mire types which makes use of indicator species to characterise mires: this suggests that Woodhead is of mire type M (Northern Eutrophic Open) and Adderstonlee of type I (Mixed Dry Oligotrophic and Wet Eutrophic). Type M is described as consisting, characteristically, of "wet *Carex* communities, *Phragmites* reed-

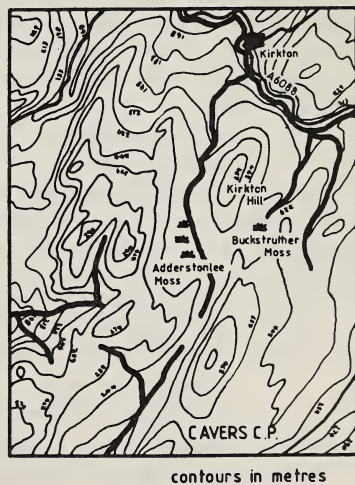
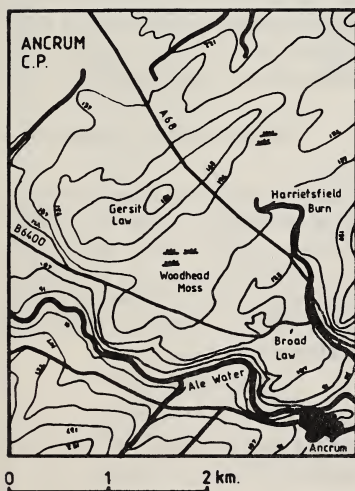
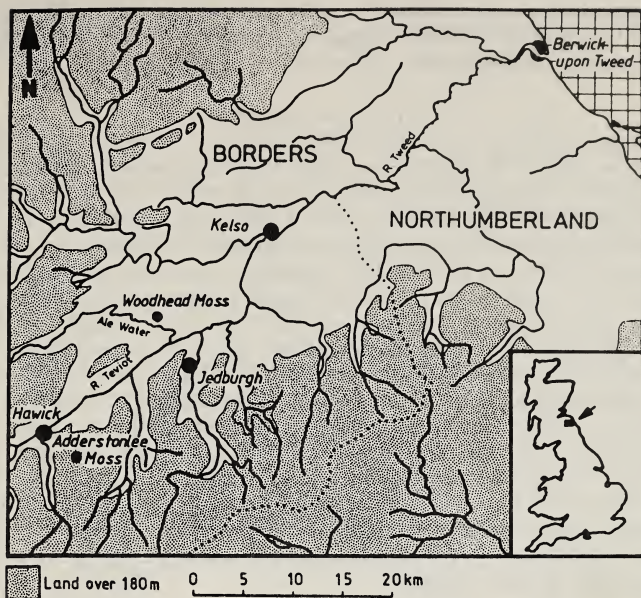


Fig. 3 Vegetation of Adderstonlee Moss.

swamp and *Salix carr*", all of which occur extensively at Woodhead. Type I, typically, Daniels suggests, contains "both wet and dry, oligotrophic, mesotrophic and eutrophic communities"

Vegetation mapping

The vegetation of each of the SSSI's has been mapped in the following way: the plan perimeter of each individual stand of vegetation was drawn by inspection, with the aid of many surveyed reference points on each of the mosses, on to a base map at 1/1000 scale. Each stand was chosen so as to appear internally homogeneous, and the floristic contents of several 1m² quadrats, randomly located within each of the stands, were recorded. Stands judged similar on the basis of the species present and their abundances were amalgamated into noda (groups). The frequencies of the taxa (the proportion of the quadrats from which the species were recorded) for each of the noda are presented in Tables 1 and 2 in ten classes, class 1 being 1 to 10% frequency, class 2 is 11 to 20%, etc. Also included are those taxa noted from a nodum, but not located in any of the quadrats, indicated by a +. Taxa are named as in Flora Europaea (Tutin *et al.*, 1980).

It should be stressed that boundaries between noda can only be arbitrary: they represent only zones of transition, not sharp changes in the vegetation. The frequencies in the tables describe the average vegetation of each nodum.

Vegetation of Woodhead Moss

The floristic content of each of the vegetation types at Woodhead Moss is shown in Table 1, and the distribution of the various types (or noda) is shown in the map in Figure 2.

The reedswamp, zones a and b in this map, is dominated by *Carex rostrata*, with:

Typha latifolia

Alisma plantago-aquatica

Lemna minor.

This area is under permanent standing water, but its depth is minimal in summer, being only a few tens of centimetres. *Rumex maritima* has been recorded from this area in the past (C. Badenoch, pers. comm.) but no sign could be found of this dock in the vegetation during this survey (July 1982 plus additional visits in 1983 and 1984).

On the drier fringes of this area, where there is standing water only in winter, in addition to the above, there are:

Agrostis stolonifera

Galium palustre

Epilobium palustre

Hippuris vulgaris

and this is shown as area c. Surrounding this is a zone of *Juncus* and *Carex* fen, e in Figure 2, that is dominated by:

Juncus effusus

Galium palustre

Caltha palustris

Carex paniculata,

the last particularly along the shaded carr margin, where it is accompanied by *Senecio jacobaea*. Stands of this nodum are mixed with dense stands of *Phragmites australis*, nodum f, which also support,

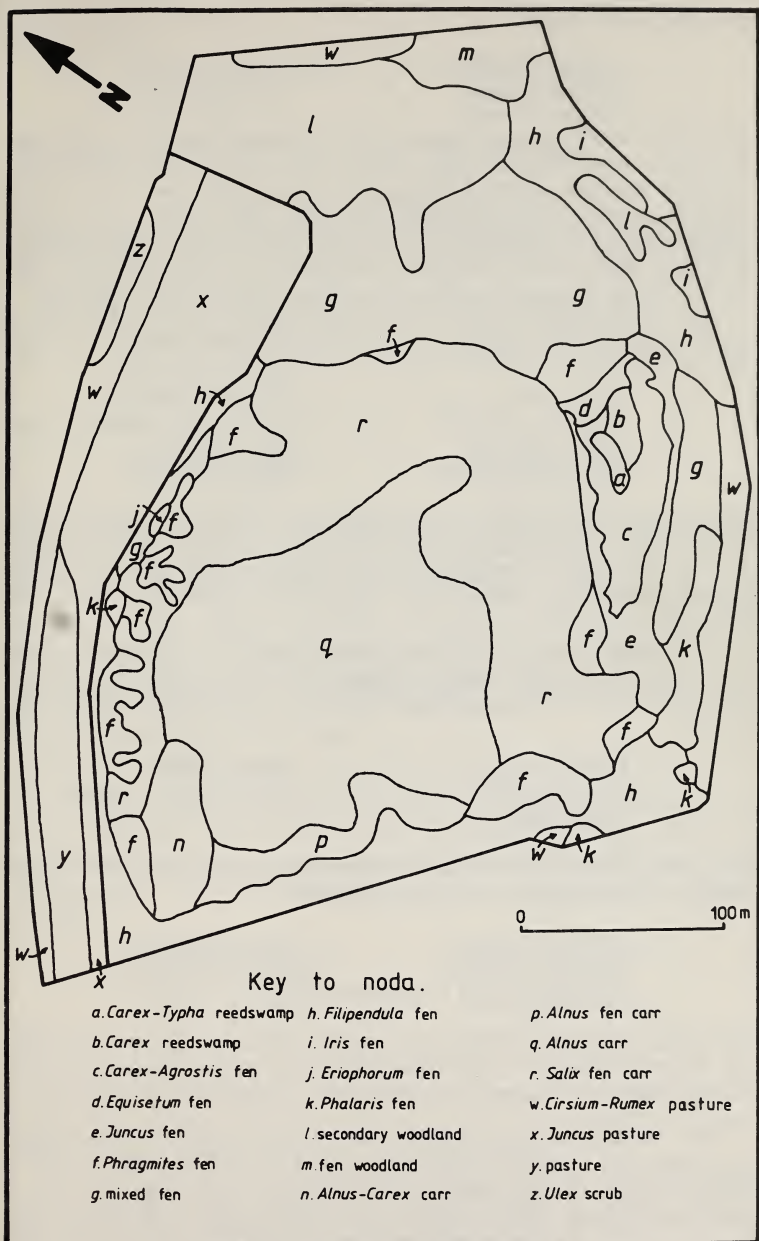


Fig. 2 Vegetation of Woodhead Moss.

amongst other herbs:

Angelica sylvestris
Galium palustre

Epilobium palustre
Caltha palustris

and with stands such as that in area d, containing little other than *Equisetum fluviatile* and *Carex rostrata*. All of these areas have some standing water in winter. In the zone dominated by *Carex rostrata* and *Agrostis stolonifera* in particular, there are small (about 1m square) patches of *Phalaris arundinacea*: these may occur on the sites of former wildfowl nests, where temporary enrichment of the immediate area has occurred. Occupied nests are scattered thinly over this area.

This reedswamp and wet fen merges outwards into a drier fen of relative species richness, shown as zones g, h and i in Figure 2, with:

Carex spp.
Angelica sylvestris
Caltha palustris
Filipendula ulmaria

Phragmites australis
Lychnis flos-cuculi
Iris pseudacorus
Juncus articulatus

forming the major part of the vegetation, along with many other herbs. This area, now protected from grazing much more securely than in the past, is supporting the development of many *Salix atrocinerea* seedlings, which may lead to future reduction of the herb diversity.

The largest part of the moss supports a carr, of mature *Alnus glutinosa* with a sedge dominated ground flora, or alternatively, of *Salix atrocinerea* with a variable understorey of a grassy nature containing:

Holcus lanatus
Galium aparine
Juncus effusus

Holcus mollis
Deschampsia caespitosa

But with *Urtica dioica* or *Phalaris arundinacea* replacing these occasionally. These latter are accompanied by:

Angelica sylvestris
Agrostis stolonifera
Thelypteris and *Dryopteris* spp.

Cirsium palustre
Ranunculus repens

The carr compromises nodes n, p, q and r in the vegetation map. This site represents the only extensive *Alnus* carr in the Borders Region, though there are numerous *Salix* carrs on suitable basin mires.

The SSSI also includes an area of wet meadow to the north-west of the moss; this supports pasture grasses such as *Cynosurus cristatus*, *Holcus lanatus*, *Phleum pratense* and *Lolium perenne*, together with a selection of *Juncus* species, thistles and clovers and is shown as areas w, x, y and z. At the northern boundary of the moss is an area (marked as zone 1) of woodland containing mature trees, some presumably planted for farm use in the early part of this century.

Here, examples of:

Populus X canadensis

Salix alba

Picea sitchensis

Populus alba

Salix purpurea

Populus tremula

are found amongst *Salix caprea* and *Alnus glutinosa*.

Vegetation of Adderstonlee Moss

Table 2 contains the frequencies of the taxa found in each nodum at Adderstonlee, and the distribution of the vegetation types is shown in a map in Figure 3.

The *Betula* carr vegetation, area r, is characterised by:

Betula pubescens

Sphagnum spp.

Polytrichum sp.,

Salix atrocinerea

Juncus acutiflorus

and more rarely:

Potentilla erecta

Carex rostrata

Potentilla palustris

Caltha palustris

giving a generally acidic and mossy ground flora, but with less acid 'pools', often in the depressions left by upturning of the roots of fallen trees. *Molinia caerulea* is confined to the south-eastern part of the *Betula* carr, where it merges into the marginal fen carr that encircles the former zone. Its presence may be due in part to the drain traversing this area of the moss, preventing extended inundation in winter, and perhaps to the nutrient status of the moss being supplemented by leaching from the improved pasture that the drain flows through above the moss.

The more extensive fen carr, with a tree layer dominated by *Salix atrocinerea*, *Salix pentandra* and *Betula pubescens*, has a dense understorey that causes considerable difficulty of access to the central parts of the wetland, and much is under standing water in winter (in contrast to the central portion of the carr, which is slightly raised by comparison). The understorey of the fen carr, zone q, typically contains:

Filipendula ulmaria

Angelica sylvestris

Galium palustre

Phragmites australis

Carex rostrata

Juncus acutiflorus,

and many other herbs. There are, in the northern part of the fen carr, small areas of a more acidic nature, with *Vaccinium oxycoccos* and *Narthecium ossifragum*, for example, but these are very limited in extent and number. The east of the fen carr is traversed by a ditch, which allows a stand of *Carex acutiformis* to flourish.

To the west and north, a broad fen has developed, where there has been grazing outside an old fence line enclosing the moss. This has allowed the development of a flora notable for its variety of Carices. The emplacement of this old fence dates from at least the mid-nineteenth century, as it is shown on a map (Mitchell, 1846) commissioned by a former owner of Adderstonshiels and Adderstonlee,

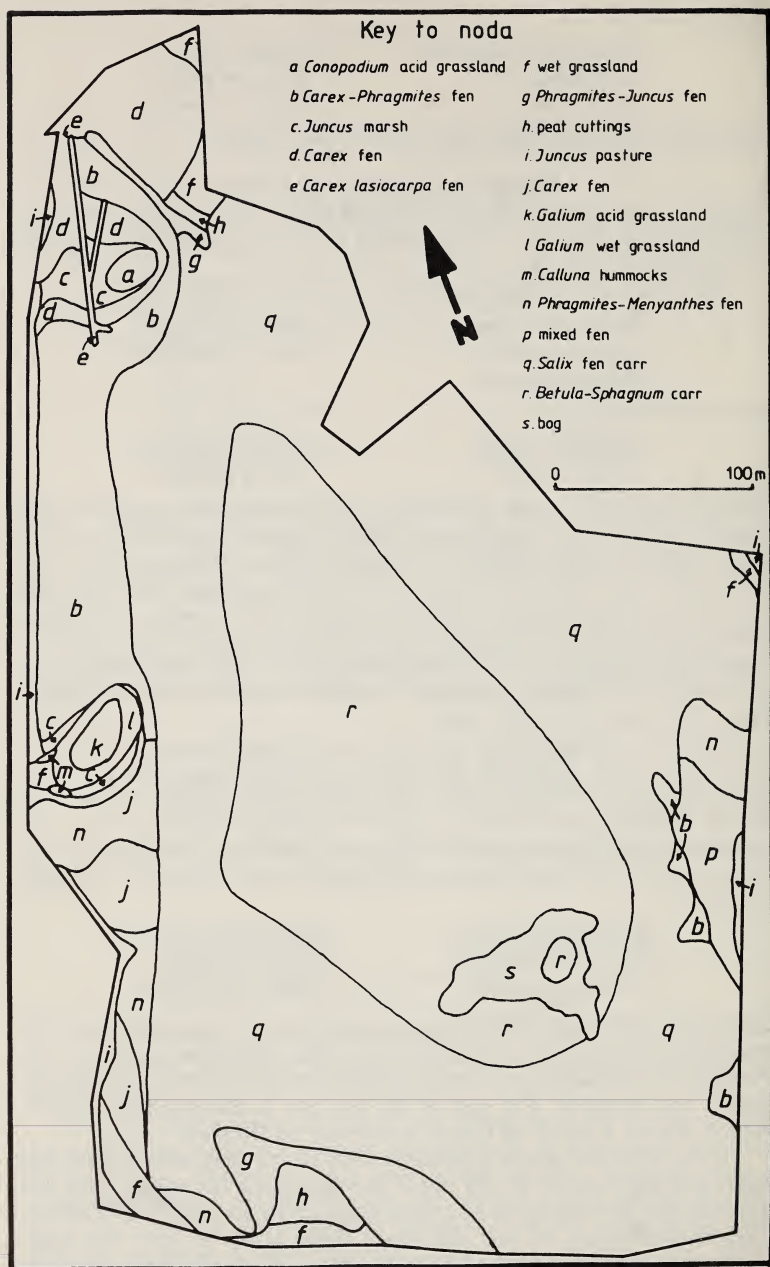


Fig. 1 Location and situation of Woodhead and Adderstonlee Mosses.

A. P. Douglas. A modern replacement for the old fence, encircling the moss more generously, is allowing the regeneration of *Salix* seedlings in the newly enclosed fen now protected from grazing.

The fen vegetation is variable, but in general is dominated by *Carex disticha*, *Phragmites australis* and *Acrocladium* sp. with, in addition:

<i>Juncus acutiflorus</i>	<i>Caltha palustris</i>
<i>Filipendula ulmaria</i>	<i>Angelica sylvestris</i>
<i>Molinia caerulea</i>	<i>Salix atrocinerea</i>

and a variety of other *Carex* species. The fen comprises nodes b, d and e.

A notable feature of the fen is that it is broken by two dry bedrock knolls, each supporting an acidic grassland, the northern, marked as vegetation zone a, being dominated by *Deschampsia caespitosa*, *Potentilla erecta*, *Galium verum*, *Conopodium majus* and *Filipendula ulmaria*, the southern, areas k and l, by *Deschampsia flexuosa*, *Potentilla erecta* and *Galium saxatile*, with lesser amounts of *Deschampsia caespitosa* and *Anthoxanthum odoratum*. These knolls are the exposed tops of the rock ridges (corrugations) that traverse the area in a north easterly direction, and must continue 'under' the moss in a like fashion. Around the knolls are concentric stands of vegetation, each characterised by a reduced minerotrophy, reflecting the outward deepening of the organic deposits.

As can be seen from the above descriptions, the character of the vegetation at each of the sites is markedly different, Adderstonlee being of greater acidity in its central carr, and Woodhead showing evidence of a generally higher nutrient status.

Human activity on the mosses

There is much evidence on each of the mires for disturbance. At Adderstonlee, the most effective recent activity has clearly been the grazing of stock within the present limits of the moss, on the area now forming the western margin. As stated above, this grazing has now ceased, following the construction of a new fence in 1980 (J. Davidson, pers. comm.), and this is allowing the rapid establishment of *Salix* seedlings in this area.

At the southern end of the moss, there is a clearly defined area that has been used for the extraction of peat at some time in the past, as there is a regular pattern of rectangular pools supporting:

<i>Carex rostrata</i>	<i>Potentilla palustris</i>
<i>Caltha palustris</i>	<i>Menyanthes trifoliata</i> .

The pools occur between a network of ridges of firm, dry peat, these having a flora characteristic of the wet grassy meadow that occurs at many places around the periphery of the mire (this area of former peat extraction is zone h in Figure 3). Notably, this area is the portion of the moss closest to the Adderstonlee steading but most remote from Kirkton, and this suggests the extracted peat was for purely local use at the Adderstonlee farm. Clearly this area of extraction has been severely disturbed in the past: it is now being actively invaded by a dense stand of *Phragmites australis* and *Juncus acutiflorus* extending

southwards from the fen carr. The latter stand is mapped as *nodum* g in Figure 3.

Thomson (1873) reports suggestions that stepping-stones had once been visible at "Adderstonshells Loch (*sic*) . . . into the middle of the lake", suggesting a former crannog, but that he failed to find any such traces during personal investigation. The considerable depth of peat (4m) across much of the basin suggests, however, that no significant lake has existed here in historic times, and none is shown on Mitchell's (1846) plan. Thomson reports "saugh" (willow) growing over the moss, confirming this.

There is no direct evidence of extraction of peat or marl from Woodhead Moss. However, the moss has been exploited extensively. The species established in the woodland to the northern end of the site show this to have been, at least in part, planted, and the main *Salix* fen carr shows some signs of having been coppiced in the past. The moss is at present actively used for wildfowling, and this has involved cutting of the vegetation within the reedswamp, and much trampling of the most accessible south eastern part of the moss. Drift from fertilisation of the surrounding agricultural land, and seepage of nutrient rich water from this land, which is largely under improved pasture or barley, has doubtless contributed to the establishment of *Urtica* and *Phalaris* within the carr, and to the eutrophic nature of the area (mapped as vegetation zone m in Figure 2) along the north-east margin of the moss.

In common with Adderstonlee, the recent more effective exclusion of stock from the moss is resulting in the rapid invasion of *Salix* into areas outside the present carr. This appears to be a common phenomenon at wetland sites within the Borders region, and has also been observed by the author at, for example Murder Moss (NT5028), part of the Whitlaw Mosses National Nature Reserve.

Comparison of the present data with previous vegetation surveys (C. Badenoch, pers. comm.) shows that the range of species at Adderstonlee Moss has not changed significantly over the last decade, but at Woodhead, the rapid closure of the remaining area of standing water has resulted in the loss of *Potamogeton* and *Elodea* species from the aquatic flora within the last ten years, in addition to *Rumex maritima*.

The most important contemporary influences upon the vegetation of the two mosses are the indirect consequences of human action, through improvement of surrounding agricultural land, and through the control of the water level within the mosses: in this respect, these mosses are by no means atypical. The future condition of the wetlands depends as much upon the management practice adopted for surrounding land as upon that for the mires themselves. The influx of nutrient rich catchment water and fertiliser drift is inevitable: changes in grazing intensity occasioned by better fencing lead to alteration of the vegetation. Furthermore, wetland sites such as these continue to preserve organic sediment, peat, and thus become drier. If the prevention of changes due to these pressures is deemed desirable, then constant and consistent management effort is required.

[illegible]

Each species is expressed as one of ten frequency classes ($1=1-10\%$, $2=11-20\%$ etc.), if present in any of the quadrats within a nodum, or a + if noted during the survey, but not found in any of the quadrats.

A B C D E F G H I J K L M N P O R S

[illegible]

This work is part of that carried out whilst in receipt of a research studentship in the Department of Geography, University of Reading. Fieldwork in the Borders has been generously supported by the Bill Bishop Memorial Trust and the Nature Conservancy Council. Warm thanks are extended to Lothian Estates, Messrs. Dagg of Woodhead, Bell of Kirkton and Davidson of Adderstonshiels for kindly granting access, to Mr. C. Badenoch for much help, Mr. D. Bell for field assistance, and to my supervisor, Dr. A. Mannion.

REFERENCES

- Daniels, R. E. (1978) Floristic analyses of British mire communities. *J. Ecol.*, v66, p773-802.
Mitchell, T. (1846) *Plan of Edderstonshiels and Edderstonlee, property of Archibald Pringle Douglas*.
Ragg, J. M. (1960) *The soils around Kelso and Lauder*. HMSO, Edinburgh.
Ratcliffe, D. (ed.) (1977) *A nature conservation review*. CUP, Cambridge.
Thomson, Rev. J. (1873) Lake dwellings in the Hawick area. *Trans. Hawick Archaeological Soc.*
Tutin, T. G., V. H. Heywood, N. A. Burges, D. M. Moore, D. H. Valentine, S. M. Walters & D. A. Webb (eds.) (5 vols., 1964-1980) *Flora Europaea*. CUP, Cambridge.

EXTRACTS FROM THE CORRESPONDENCE OF DR. JAMES HARDY WITH MRS. JANE BARWELL-CARTER

Letter 107.

Oldcambus, March 24, 1891.

Your letters received, and directions will be attended to. This is merely a line to say that the last revisal will be completed today, and I will be sending you the MSS soon, with the Obituary notices so far as they can be got. I got Mrs Griffith's from Torquay, a note very much to the purpose. Dr Greville and Dr Swinburn have also been obtained, and also the Rev. William Little. Nothing yet, however, about the precise date of Mr Thompson's death, Feb. 1852, I infer from one of the letters. There is also a Dr Drummond at Belfast, whose books I have—Thompson, Drummond and Patterson are the three. I have got Mr Haliday who was my correspondent. Mr Ingham also of South Shields whose house at Westoe I know well. There is another Newcastle man, William Hutton, the geologist, whose record is obtainable. Bowman and the Hancocks and Alder were all my acquaintances.

You may probably not have room for all, but can select what you want, and omit what are not desirable. So few of the parties mentioned are now alive, that without notes the correspondence would be unintelligible to present day livers.

I think I will transcribe your Father's letter to Dr Fleming from Duns's Memoir, as it corresponds in subject with the others.

The notice of Mrs Gatty will appropriately close the book. I will return the rest of Dr Gatty's letters.

If I have not all the notices finished I can send them afterwards written at more leisure. I am expecting every day to be asked for Club's Report, and I have none of it written. Sir Wm. Crossman is keeping the proof of his adress a very long time.

The Mayor has asked me to his dinner, but I have excused myself, as I cannot stand the night air, and have need to be careful, there is so much to do before the end of May. I was also asked to the High Sheriff's dinner at Newcastle but could not go, without great risk. I hear they expect me to help somewhat with the proposed new history of Northumberland.

It is very cold at present outside. I get to the church when the weather is mild well "happed up".

Our spring flowers have been very much blasted. There is a great sowing of grain proceeding within view. We had a shower of snow this morning but it has quickly melted.

Note.—The subject matter of letters 107-110 relates to the correspondence included in *Selections from the Correspondence of Dr. George Johnston* edited by Dr. Hardy and published in 1892. In this book numerous footnotes give brief biographical accounts of the people named. Some were naturalists whose names still live in the work they accomplished.

Letter 108.

Oldcambus, May 5, 1891.

I have compressed the Riot into six lines. Annexed you will find Obituary notices of Prof. Ball, and Dr Carpenter should they be required; also the dates of Edward Forbes, F.R.S. There are some others cannot be found in Biographical Dictionaries. The dates about Prof. Allman in former notices are somewhat dubious; as they make him die in 1846, while if he preserved his identity he succeeded Prof. Ed. Forbes in 1856. Before he is called up there will be time to consult some other authority. Dates are not very correctly given in some of these popular biographies.

I got yours on May 1, but was busy; on Monday I got out to Chirnside and met Dr Stuart, Mr Paul, and Mr Ferguson, I saw Ninewells, and inspected Dr Stuart's Flower garden, and enjoyed the golden day. It is much colder today. The Meeting of May is nearly arranged. Edlingham Hall grounds are to be opened, and Sir John Haggerston offers refreshment, breakfast and dinner are at Alnwick. I shall probably have to compile a few historical observations as we are going to survey new ground. I may meet with some information at Alnwick in the end of the month.

Letter 109.

Oldcambus, May 11, 1891.

Although rather pressed for time I have managed to look over the additional letters and to append three notices. I also give some memoranda to show how the Buckland family were situated, and that the letter appears to have come to Dr Johnston in the latter days of Dr Buckland. It will show the period when *Islip* became his residence, and that he lived there 10 years, the first part till 1851 happily. The remainder unknown, as I have no other book except the son's. It had occurred to me as it did to you, that a cloud had passed over the Dean in his latter years. Apparently Mrs Buckland was only a "beginner"; and when she commenced she promised a copy of the Bristol Sponges, as referred to. Mr Queckett who assisted her knew something about Worms at least.

I have Dr Balmar's Lecture somewhere. Your Mother took me to hear him, once when I was at Berwick. As regards Grey and Laurie, you had better ask someone. Grey occurs afterwards in the Landsborough correspondence. The Tweedmouth Presbyterian ministers are out of my reach.

I am glad you corrected Sir Roderick I. Murchison for so his biographer writes. I had both the "Siluria" and the Life by Dr Geikie before me, but I have had two things before me at the same time all through.

I have still two reports to write. I heard of two Club members who will likely take the Correspondence once it is fairly announced.

I am asked to Pallinsburn at next meeting of Club. I was, however, pre-engaged. Sir John de M. Haggerston invites the Club to luncheon at Ellingham Hall on 27th.

P.S. Alnwick Press is at a standstill owing to Sir Wm. Crossman not returning the proofs. Now is the best time to send your MSS.

*Letter 110.*Oldcambus by Cockbunspath,
May 21, 1891.

I am just reminded to write to you. I have a letter from Rev. Leonard Blomefield, now 92 years old. He has 4 or 5 of your Father's letters to him bound up with others. He cannot transcribe them owing to his weakness of sight, but I will suggest that he may find one to assist. I write him tomorrow.

I have had a bad cold since I wrote you, but I think it is leaving: it is as much indigestion as cold. In the end of the week I had to go over the Coldingham Charulary in search of the Edingtons of Edington, for a Col. Eddington. I found I had a good long story to tell, and it had a satisfactory conclusion as it led to bringing him into the line. He will probably bring out "The Edingtons of that Ilk". It added to my cold, but I hope I shall rally. . . . I go to Mr Hindmarsh's on Tuesday to Alnwick, and stay with him. There are 7 nominations for candidates; one of these from "Rosybank, Coldstream". A Mr Carmichael lives there now, who has already become a member. It will be a nice little "We are seven" to start with.

Mr Blomefield sends a few memoranda, but I am not sure that they supply much more than I gave. I will see what can be done at Alwinton. I have been reading the "Naturalist of Cumbrae—David Robertson", which gives a few data that I have noted. I ought to have looked into Sir Wyville Thomson's "Depths of the Sea" to see more about Dr Gwyn Jeffreys. His book on British Shells has superseded Forbes and Hanley. These text books swallow up each other. At Dunbar I saw a new book on Zoophytes by a Rev. Hincks which includes the new species since your Father's time. It is one of Van Voorst's publications. The plates look rough and the experimentalist at the Fishery Station said they were not very correct. He had numerous microscopic slides of Zoophytes, showing the polyps at the moment of expansion.

My brother and two nephews have gone with the E. Lothian Yeomanry to the General Assembly procession. They are the gayest of the military on such occasions, and have the best of horses.

I was pleased to see that the Bishop of Lichfield has become Archbishop of York. We have the Bishop of Peterborough in our ranks.

J.H.

TREASURER'S FINANCIAL STATEMENT FOR THE YEAR ENDING 20th SEPTEMBER, 1983

<i>Income</i>		<i>Expenditure</i>	
Balance in Bank at 21:9:82	£127.16	Printing	283.59
<i>Subscriptions</i>		Printer's Postages	125.40
Annual, Junior and Libraries	1705.25	<i>Subscriptions Paid:</i>	
Entry Fees & Badges	54.30	Scottish Region of Council for	
<i>Sundries</i>		British Archaeology	8.50
Refund of Income Tax	10.75	Association for the Protection of	
Visitors' Fees	64.70	Rural Scotland	10.00
Donations	10.00	<i>Sundries:</i>	
Arrears 1982 Subs.	20.00	Library Insurance	16.09
Sale of Ties	28.00	Hire of Hall	9.00
Entrance Fee charged for Lecture on		The Royal Label Factory for	
12:11:82 £11.00, less Hire of		Plaque	58.65
Hall £4.50	6.50	Refund of Subscriptions	58.00
Sale of Photographs	4.25	<i>Officials' Expenses:</i>	
		Mrs. E. A. Edgar, past Treasurer	5.59
		Mr. T. D. Thomson, Editing	
		Secretary	12.00
		Mr. & Mrs. D. MacKenzie	
		Robertson, Joint Field Secs.	271.68
		Miss. S. G. Stoddart, Treasurer	30.54
		Transferred to Deposit Account	1,000.00
		Balance in Bank at 20:9:83	141.87
			<hr/>
			2030.91
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Balance held on Current Account as at 17th October 1983 £2.46.

Balance held on Deposit Account-as at 17th October 1983 £2,265.67.

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